

Safety Data Sheet

acc. to OSHA HCS




Printing date 12/31/2013

Reviewed on 12/31/2013

1 Identification

- **Product identifier**
- **Trade name:** Paraformaldehyde, PRILLS
- **Article number:** 19200, 19202
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**
 - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
 **Harmful**
 Harmful by inhalation. May cause sensitisation by inhalation.
 -  **Irritant**
 Irritating to eyes, respiratory system and skin.
 - **Information concerning particular hazards for human and environment:**
The product has to be labeled due to the calculation procedure of international guidelines.
 - **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
-
- **Label elements**
 - **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with directives on hazardous materials.
 - **Code letter and hazard designation of product:**
 **Harmful**
 - **Hazard-determining components of labeling:**
Paraformaldehyde
 - **Risk phrases:**
Harmful by inhalation.
Irritating to eyes, respiratory system and skin.
May cause sensitisation by inhalation.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 1)

- **Safety phrases:**

Keep container in a well-ventilated place.

Do not breathe dust.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 2

Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = *2

Fire = 2

Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

30525-89-4	Paraformaldehyde	50-100%

4 First-aid measures

- **Description of first aid measures**

- **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:** If symptoms persist consult doctor.

- **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

USA

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 2)

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
- **Information about protection against explosions and fires:** Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 3)

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Solid
Color:	Colorless
Odor:	Pungent
Odour threshold:	Not determined.

· **pH-value at 20 °C (68 °F):** 3.5

· **Change in condition**

Melting point/Melting range:	120 °C (248 °F)
Boiling point/Boiling range:	Undetermined.

· **Flash point:** 70 °C (158 °F)

· **Flammability (solid, gaseous):** Not determined.

· **Ignition temperature:** 300 °C (572 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 4)

· Explosion limits:	
Lower:	7 Vol %
Upper:	73 Vol %
· Vapor pressure at 20 °C (68 °F): X hPa	
· Density at 20 °C (68 °F): 1.235 g/cm ³ (10.306 lbs/gal)	
· Relative density Not determined.	
· Vapour density Not applicable.	
· Evaporation rate Not applicable.	
· Solubility in / Miscibility with Water: Insoluble.	
· Partition coefficient (n-octanol/water): Not determined.	
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	0.0 %
Water:	3.0 %
VOC content:	3.0 %
· Solids content: 86.3 %	
· Other information No further relevant information available.	

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

30525-89-4 Paraformaldehyde

Oral	LD50	800 mg/kg (Rat)
Dermal	LD50	10000 mg/kg (rabbit)
Inhalative	LC50/4 h	1070 mg/l (Rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through inhalation.
- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 5)

Harmful
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA** UN2213

· **UN proper shipping name**

· **DOT** Paraformaldehyde
· **ADR** 2213 Paraformaldehyde
· **IMDG, IATA** PARAFORMALDEHYDE

· **Transport hazard class(es)**

· **DOT, IMDG, IATA**

· **Class** 4.1 Flammable solids, self-reactive substances and solid desensitised explosives.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 6)

· **Label** -· **ADR**· **Class**

4.1 Flammable solids, self-reactive substances and solid desensitised explosives

· **Label**

4.1

· **Packing group**· **DOT, IMDG, IATA**

Void

· **ADR**

III

· **Environmental hazards:**· **Marine pollutant:**

No

· **Special precautions for user**

Warning: Flammable solids, self-reactive substances and solid desensitised explosives

· **Danger code (Kemler):**

40

· **EMS Number:**

F-A,S-G

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Sara**· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 7)

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**



Harmful

· **Hazard-determining components of labeling:**

Paraformaldehyde

· **Risk phrases:**

Harmful by inhalation.

Irritating to eyes, respiratory system and skin.

May cause sensitisation by inhalation.

· **Safety phrases:**

Keep container in a well-ventilated place.

Do not breathe dust.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

USA

Safety data sheet
according to 1907/2006/EC, Article 31




Printing date 31.12.2013

Revision: 31.12.2013

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Paraformaldehyde, PRILLS
- **Article number:** 19200, 19202
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- ProSciTech Pty Ltd
11 Carlton Street, Kirwan QLD 4817 Australia
Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)
Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazards identification

- **Classification of the substance or mixture**
 - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
 -  **Harmful**
Harmful by inhalation.
 -  **Irritant**
Irritating to eyes, respiratory system and skin.
 -  **Sensitising**
May cause sensitisation by inhalation.
 - **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
 - **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
-
- **Label elements**
 - **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

(Contd. on page 2)

AU

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 1)

· Code letter and hazard designation of product:



Harmful

· Hazard-determining components of labelling:

Paraformaldehyde

· Risk phrases:

Harmful by inhalation.

Irritating to eyes, respiratory system and skin.

May cause sensitisation by inhalation.

· Information concerning particular hazards for human and environment:

· Safety phrases:

Keep container in a well-ventilated place.

Do not breathe dust.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

· Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

30525-89-4	Paraformaldehyde	50-100%
------------	------------------	---------

· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· Description of first aid measures

· General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.

· Information for doctor:

· Most important symptoms and effects, both acute and delayed No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

AU

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 2)

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
- **Information about fire - and explosion protection:** Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.

(Contd. on page 4)

AU

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 3)

Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Solid
Colour:	Colourless
Odour:	Pungent
Odour threshold:	Not determined.

· **pH-value at 20 °C:** 3.5

· **Change in condition**

Melting point/Melting range:	120 °C
Boiling point/Boiling range:	Undetermined.

· **Flash point:** 70 °C

· **Flammability (solid, gaseous):** Not determined.

· **Ignition temperature:** 300 °C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 4)

· Explosion limits:	
Lower:	7 Vol %
Upper:	73 Vol %
· Vapour pressure at 20 °C: X hPa	
· Density at 20 °C: 1.235 g/cm ³	
· Relative density Not determined.	
· Vapour density Not applicable.	
· Evaporation rate Not applicable.	
· Solubility in / Miscibility with water: Insoluble.	
· Partition coefficient (n-octanol/water): Not determined.	
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	0.0 %
Water:	3.0 %
VOC (EC)	0.00 %
· Solids content: 86.3 %	
· Other information No further relevant information available.	

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values relevant for classification:		
30525-89-4 Paraformaldehyde		
Oral	LD50	800 mg/kg (Rat)
Dermal	LD50	10000 mg/kg (rabbit)
Inhalative	LC50/4 h	1070 mg/l (Rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through inhalation.

(Contd. on page 6)

AU

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 5)

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful
Irritant

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behaviour in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**

· **ADG, IMDG, IATA**

UN2213

· **UN proper shipping name**

· **ADG**

2213 PARAFORMALDEHYDE

· **IMDG, IATA**

PARAFORMALDEHYDE

· **Transport hazard class(es)**

· **ADG**



· **Class**

4.1 Flammable solids, self-reactive substances and solid desensitised explosives.

· **Label**

4.1

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 6)

· IMDG, IATA	
· Class	4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
· Label	-
· Packing group	
· ADG	III
· IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable solids, self-reactive substances and solid desensitised explosives.
· Danger code (Kemler):	40
· EMS Number:	F-A,S-G
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADG	
· Limited quantities (LQ)	LQ9
· Transport category	3
· Tunnel restriction code	E

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Australian Inventory of Chemical Substances**

All ingredients are listed.

· **Standard for the Uniform Scheduling of Drugs and Poisons**

30525-89-4 Paraformaldehyde

S2 +APPEN

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**



Harmful

· **Hazard-determining components of labelling:**

Paraformaldehyde

· **Risk phrases:**

Harmful by inhalation.

Irritating to eyes, respiratory system and skin.

May cause sensitisation by inhalation.

· **Safety phrases:**

Keep container in a well-ventilated place.

Do not breathe dust.

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 7)

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

-AU-

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

1 Identification

- **Product identifier**
- **Trade name:** Paraformaldehyde, PRILLS
- **Article number:** 19200, 19202
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

H228 Flammable solid.



GHS08 Health hazard

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Harmful

Harmful by inhalation. May cause sensitisation by inhalation.



Irritant

Irritating to eyes, respiratory system and skin.

- **Information concerning particular hazards for human and environment:**

The product has to be labeled due to the calculation procedure of international guidelines.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 1)

· **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **Label elements**

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Code letter and hazard designation of product:**



Harmful

· **Hazard-determining components of labeling:**

Paraformaldehyde

· **Risk phrases:**

Harmful by inhalation.

Irritating to eyes, respiratory system and skin.

May cause sensitisation by inhalation.

· **Safety phrases:**

Keep container in a well-ventilated place.

Do not breathe dust.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

· **Hazard description:**

· **WHMIS-symbols:**

B4 - Flammable solid

D2A - Very toxic material causing other toxic effects



· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 2

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = *2

Fire = 2

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

CA

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013




Trade name: Paraformaldehyde, PRILLS

(Contd. of page 2)

3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

30525-89-4	Paraformaldehyde	50-100%
	 H228;  H334;  H302; H315; H319; H335	

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

CA

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 3)

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
- **Information about protection against explosions and fires:** Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 4)

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Solid
Color:	Colorless
Odor:	Pungent
Odour threshold:	Not determined.

· pH-value at 20 °C: 3.5

· Change in condition

Melting point/Melting range:	120 °C
Boiling point/Boiling range:	Undetermined.

· Flash point: 70 °C

· Flammability (solid, gaseous): Not determined.

· Ignition temperature: 300 °C

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower:	7 Vol %
Upper:	73 Vol %

· Vapor pressure at 20 °C: X hPa

Density at 20 °C:	1.235 g/cm ³
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.

· Solubility in / Miscibility with

Water: Insoluble.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic:	Not applicable.
Kinematic:	Not applicable.

· Solvent content:

Organic solvents:	0.0 %
Water:	3.0 %

Solids content: 86.3 %

(Contd. on page 6)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 5)

· **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

30525-89-4 Paraformaldehyde

Oral	LD50	800 mg/kg (Rat)
Dermal	LD50	10000 mg/kg (rabbit)
Inhalative	LC50/4 h	1070 mg/l (Rat)

· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

· **Sensitization:** Sensitization possible through inhalation.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS


(Contd. of page 6)

- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

<ul style="list-style-type: none"> · UN-Number · DOT, TDG, IMDG, IATA 	UN2213
<ul style="list-style-type: none"> · UN proper shipping name · DOT · TDG · IMDG, IATA 	Paraformaldehyde 2213 Paraformaldehyde PARAFORMALDEHYDE
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT, IMDG, IATA · Class · Label · TDG (Transport dangerous goods): 	4.1 Flammable solids, self-reactive substances and solid desensitised explosives. -
<div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Class · Label 	4.1 Flammable solids, self-reactive substances and solid desensitised explosives 4.1
<ul style="list-style-type: none"> · Packing group · DOT, IMDG, IATA · TDG 	Void III
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: 	No
<ul style="list-style-type: none"> · Special precautions for user · Danger code (Kemler): · EMS Number: 	Warning: Flammable solids, self-reactive substances and solid desensitised explosives 40 F-A,S-G
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.

(Contd. on page 8)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 7)

· UN "Model Regulation":	UN2213, Paraformaldehyde, 4.1, III
---------------------------------	------------------------------------

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

· Section 355 (extremely hazardous substances):	None of the ingredients is listed.
--	------------------------------------

· Section 313 (Specific toxic chemical listings):	None of the ingredients is listed.
--	------------------------------------

· TSCA (Toxic Substances Control Act):	All ingredients are listed.
---	-----------------------------

· Proposition 65	
-------------------------	--

· Chemicals known to cause cancer:	None of the ingredients is listed.
---	------------------------------------

· Chemicals known to cause reproductive toxicity for females:	None of the ingredients is listed.
--	------------------------------------

· Chemicals known to cause reproductive toxicity for males:	None of the ingredients is listed.
--	------------------------------------

· Chemicals known to cause developmental toxicity:	None of the ingredients is listed.
---	------------------------------------

· Carcinogenic categories	
----------------------------------	--

· EPA (Environmental Protection Agency)	None of the ingredients is listed.
--	------------------------------------

· TLV (Threshold Limit Value established by ACGIH)	None of the ingredients is listed.
---	------------------------------------

· NIOSH-Ca (National Institute for Occupational Safety and Health)	None of the ingredients is listed.
---	------------------------------------

· OSHA-Ca (Occupational Safety & Health Administration)	None of the ingredients is listed.
--	------------------------------------

· Canadian substance listings:	
---------------------------------------	--

· Canadian Domestic Substances List (DSL)	All ingredients are listed.
--	-----------------------------

· Canadian Ingredient Disclosure list (limit 0.1%)	None of the ingredients is listed.
---	------------------------------------

· Canadian Ingredient Disclosure list (limit 1%)	30525-89-4 Paraformaldehyde
---	-----------------------------

· Product related hazard informations:	The product has been classified and marked in accordance with directives on hazardous materials.
---	--

(Contd. on page 9)

CA

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/31/2013

Reviewed on 12/31/2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 8)

· **Hazard symbols:**



Harmful

· **Hazard-determining components of labeling:**

Paraformaldehyde

· **Risk phrases:**

Harmful by inhalation.

Irritating to eyes, respiratory system and skin.

May cause sensitisation by inhalation.

· **Safety phrases:**

Keep container in a well-ventilated place.

Do not breathe dust.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Paraformaldehyde, PRILLS
- **Article number:** 19200, 19202
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Sol. 2 H228 Flammable solid.



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R20: Harmful by inhalation.



Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.



Xn; Sensitising

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 1)

R42: May cause sensitisation by inhalation.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**



Xn Harmful

- **Hazard-determining components of labelling:**

Paraformaldehyde

- **Risk phrases:**

20 Harmful by inhalation.
36/37/38 Irritating to eyes, respiratory system and skin.
42 May cause sensitisation by inhalation.

- **Safety phrases:**

9 Keep container in a well-ventilated place.
22 Do not breathe dust.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
60 This material and its container must be disposed of as hazardous waste.

- **Other hazards**

- **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

30525-89-4	Paraformaldehyde	50-100%
	Xn R20; Xi R36/37/38; Xn R42 Flam. Sol. 2, H228; Resp. Sens. 1, H334; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**

- **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 2)

- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
- **Information about fire - and explosion protection:** Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

GB

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 3)

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- **Form:** Solid
- **Colour:** Colourless
- **Odour:** Pungent
- **Odour threshold:** Not determined.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 4)

· pH-value at 20 °C:	3.5
· Change in condition	
Melting point/Melting range:	120 °C
Boiling point/Boiling range:	Undetermined.
· Flash point:	70 °C
· Flammability (solid, gaseous):	Not determined.
· Ignition temperature:	300 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	7 Vol %
Upper:	73 Vol %
· Vapour pressure at 20 °C:	X hPa
· Density at 20 °C:	1.235 g/cm ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Insoluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
Organic solvents:	0.0 %
Water:	3.0 %
VOC (EC)	0.00 %
Solids content:	86.3 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

GB

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 5)

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

30525-89-4 Paraformaldehyde

Oral	LD50	800 mg/kg (Rat)
Dermal	LD50	10000 mg/kg (rabbit)
Inhalative	LC50/4 h	1070 mg/l (Rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through inhalation.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **ADR, IMDG, IATA** UN2213

(Contd. on page 7)


Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 6)

· UN proper shipping name	
· ADR	2213 PARAFORMALDEHYDE
· IMDG, IATA	PARAFORMALDEHYDE
· Transport hazard class(es)	
· ADR	
	
· Class	4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
· Label	4.1
· IMDG, IATA	
· Class	4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
· Label	-
· Packing group	
· ADR	III
· IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable solids, self-reactive substances and solid desensitised explosives.
· Danger code (Kemler):	40
· EMS Number:	F-A,S-G
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	LQ9
· Transport category	3
· Tunnel restriction code	E
· UN "Model Regulation":	UN2213, PARAFORMALDEHYDE, 4.1, III

15 Regulatory information

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H228 Flammable solid.

H302 Harmful if swallowed.

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 31.12.2013

Revision: 31.12.2013

Trade name: Paraformaldehyde, PRILLS

(Contd. of page 7)

*H315 Causes skin irritation.**H319 Causes serious eye irritation.**H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.**H335 May cause respiratory irritation.**R20 Harmful by inhalation.**R36/37/38 Irritating to eyes, respiratory system and skin.**R42 May cause sensitisation by inhalation.***Abbreviations and acronyms:***ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**GHS: Globally Harmonized System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent*

GB

Bezpečnostní list

podle 1907/2006/ES, Článek 31

Datum vydání: 31.12.2013

Revize: 31.12.2013

1 Identifikace látky/směsi a společnosti/podniku

- **Identifikátor výrobku**
- **Obchodní označení: Paraformaldehyde, PRILLS**
- **Číslo výrobku:** 19200, 19202
- **Příslušná určená použití látky nebo směsi a nedoporučená použití** Další relevantní informace nejsou k dispozici.
- **Použití látky / přípravku** Laboratorní chemikálie
- **Podrobné údaje o dodavateli bezpečnostního listu**
- **Identifikace výrobce/dovozce:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Obor poskytující informace:** Product safety department
- **Telefonní číslo pro naléhavé situace:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Identifikace nebezpečnosti

- **Klasifikace látky nebo směsi**
- **Klasifikace v souladu s nařízením (ES) č. 1272/2008**



GHS02 plamen

Flam. Sol. 2 H228 Hořlavá tuhá látka.



GHS08 nebezpečnost pro zdraví

Resp. Sens. 1 H334 Při vdechování může vyvolat příznaky alergie nebo astmatu nebo dýchací potíže.



GHS07

Acute Tox. 4 H302 Zdraví škodlivý při požití.

Skin Irrit. 2 H315 Dráždí kůži.

Eye Irrit. 2 H319 Způsobuje vážné podráždění očí.

STOT SE 3 H335 Může způsobit podráždění dýchacích cest.

- **Klasifikace podle směrnice Rady 67/548/EHS nebo směrnice 1999/45/ES**



Xn; Zdraví škodlivý

R20: Zdraví škodlivý při vdechování.



Xi; Dráždivý

R36/37/38: Dráždí oči, dýchací orgány a kůži.



Xn; Senzibilizující

R42: Může vyvolat senzibilizaci při vdechování.

(pokračování na straně 2)

Bezpečnostní list

podle 1907/2006/ES, Článek 31

Datum vydání: 31.12.2013

Revize: 31.12.2013

Obchodní označení: Paraformaldehyd, PRILLS

(pokračování strany 1)

- **Nejzávažnější nepříznivé účinky na zdraví člověka a životní prostředí při používání látky/přípravku**
Výrobek podléhá povinnému označování na základě výpočtové metody "Všeobecné směrnice Evropského společenství pro zařazování přípravků" v posledním platném znění.
- **Klasifikační systém:**
Klasifikace odpovídá aktuálním směrnici ES, je však doplněna údaji z odborné literatury a firemními údaji.

- **Prvky označení**

- **Označení podle právních směrnic EHS:**
Produkt je zařazen a označen podle směrnic ES/nařízení o nebezpečných látkách.
- **Poznávací písmeno a označení nebezpečnosti produktu:**



Xn Zdraví škodlivý

- **Nebezpečné komponenty k etiketování:**
paraformaldehyd
- **R-věty:**
 - 20 Zdraví škodlivý při vdechování.
 - 36/37/38 Dráždí oči, dýchací orgány a kůži.
 - 42 Může vyvolat senzibilizaci při vdechování.
- **S-věty:**
 - 9 Uchovávejte obal na dobře větraném místě.
 - 22 Nevdechujte prach.
 - 45 V případě nehody, nebo necítíte-li se dobře, okamžitě vyhledejte lékařskou pomoc (je-li možno, ukažte toto označení).
 - 60 Tento materiál a jeho obal musí být zneškodněny jako nebezpečný odpad.
- **Další nebezpečnost**
- **Výsledky posouzení PBT a vPvB**
- **PBT:** Nedá se použít.
- **vPvB:** Nedá se použít.

3 Složení/informace o složkách

- **Chemická charakteristika: Směsi**
- **Popis:** Směs obsahuje následné látky bez nebezpečných příměsí.

- **Výrobek obsahuje tyto nebezpečné látky:**

30525-89-4	paraformaldehyd	50-100%
	Xn R20; Xi R36/37/38; Xn R42 Flam. Sol. 2, H228; Resp. Sens. 1, H334; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	

- **R-věta:** 20-36/37/38-42
- **S-věta:** 9-22-45-60
- **Dodatečná upozornění:** Znění uvedených údajů o nebezpečnosti látky je uvedeno v kapitole 16.

CZ

(pokračování na straně 3)

Bezpečnostní list

podle 1907/2006/ES, Článek 31

Datum vydání: 31.12.2013

Revize: 31.12.2013

Obchodní označení: Paraformaldehyd, PRILLS

(pokračování strany 2)

4 Pokyny pro první pomoc

- **Popis první pomoci**
- **Všeobecné pokyny:**
Příznaky otravy se mohou projevit až po mnoha hodinách, proto je nutný lékařský dohled nejméně 48 hodin po nehodě.
- **Při nadýchání:**
Přívod čerstvého vzduchu, případně kyslíkový přístroj, teplo. Při déle trvajících potížích konzultovat lékaře.
Při bezvědomí uložit a přepravit ve stabilní poloze na boku.
- **Při styku s kůží:** Ihned omýt vodou a mýdlem a dobře opláchnout.
- **Při zasažení očí:**
Oči s otevřenými víčky vyplachovat po více minut proudem tekoucí vody. Při přetrvávajících potížích se poradit s lékařem.
- **Při požití:** Při přetrvávajících potížích konzultovat s lékařem.
- **Upozornění pro lékaře:**
- **Nejdůležitější akutní a opožděné symptomy a účinky** Další relevantní informace nejsou k dispozici.
- **Pokyn týkající se okamžité lékařské pomoci a zvláštního ošetření** Další relevantní informace nejsou k dispozici.

5 Opatření pro hašení požáru

- **Hasiva**
- **Vhodná hasiva:**
CO₂, hasící prášek nebo rozstříkované vodní paprsky. Větší ohně zdotat rozstříkovanými vodními paprsky nebo pěnou odolnou vůči alkoholu.
- **Zvláštní nebezpečnost vyplývající z látky nebo směsi** Další relevantní informace nejsou k dispozici.
- **Pokyny pro hasiče**
- **Zvláštní ochranné prostředky pro hasiče:** Použít ochranný dýchací přístroj.

6 Opatření v případě náhodného úniku

- **Opatření na ochranu osob, ochranné prostředky a nouzové postupy** Není nutné.
- **Opatření na ochranu životního prostředí:** Nenechat proniknout do kanalizace/povrchových vod/podzemních vod.
- **Metody a materiál pro omezení úniku a pro čištění:**
Kontaminovaný materiál odstranit jako odpad podle bodu 13.
Zajistit dostatečné větrání.
- **Odkaz na jiné oddíly**
Informace o bezpečnému zacházení viz kapitola 7.
Informace o osobní ochranné výstroji viz kapitola 8.
Informace k odstranění viz kapitola 13.

7 Zacházení a skladování

- **Pokyny pro zacházení:**
- **Opatření pro bezpečné zacházení**
Dobré odprašování.
Na pracovišti zabezpečit dobré větrání a odsávání.
Zamezit vytváření prachu.
- **Upozornění k ochraně před ohněm a explozí:** Chránit před horkem.
- **Podmínky pro bezpečné skladování látek a směsí včetně neslučitelných látek a směsí**
- **Pokyny pro skladování:**
- **Požadavky na skladovací prostory a nádoby:** Žádné zvláštní požadavky.

(pokračování na straně 4)

Bezpečnostní list

podle 1907/2006/ES, Článek 31

Datum vydání: 31.12.2013

Revize: 31.12.2013

Obchodní označení: Paraformaldehyde, PRILLS

(pokračování strany 3)

- **Upozornění k hromadnému skladování:** Není nutné.
- **Další údaje k podmínkám skladování:**
Nádrž držet neprodyšně uzavřenou.
Chránit před horkem a přímým slunečním světlem.
- **Specifické konečné / specifická konečná použití** Další relevantní informace nejsou k dispozici.

8 Omezování expozice / osobní ochranné prostředky

- **Technická opatření:** Žádné další údaje, viz bod 7.
- **Kontrolní parametry**
- **Kontrolní parametry:**
Produkt neobsahuje žádná relevantní množství látek, u kterých se musí kontrolovat hraniční hodnoty na pracovišti.
- **Další upozornění:** Jako podklad sloužily při zhotovení platné listiny.
- **Omezování expozice**
- **Osobní ochranné prostředky:**
- **Všeobecná ochranná a hygienická opatření:**
Zdržovat od potravin, nápojů a krmiv.
Zašpiněné, nasáknuté šaty ihned vysvléci.
Před přestávkami a po práci umýt ruce.
Zamezit styku s pokožkou a zrakem.
- **Ochrana dýchacích orgánů:**
Při krátkodobém nebo nízkém zatížení použít dýchací přístroj s filtrem, při intenzivním nebo delším zatížení se musí použít dýchací přístroj nezávislý na okolním vzduchu.
- **Ochrana rukou:**



Ochranné rukavice

Materiál rukavic musí být nepropustný a odolný proti produktu / látce / směsi.
Vzhledem k tomu, že chybí testy, není možné doporučit materiál rukavic pro produkt / přípravek / chemickou směs.
Výběr materiálu rukavic proveďte podle času průniku, permeability a degradace.

- **Materiál rukavic**
Správný výběr rukavic nezávisí jen na materiálu, ale také na dalších kritériích, která se liší podle výrobce. Protože je výrobek směs více látek, nelze materiál rukavic předem vypočítat a je nutno udělat před použitím zkoušku.
- **Doba průniku materiálem rukavic**
Je nutno u výrobce rukavic zjistit a dodržovat přesné časy průniku materiálem ochranných rukavic.
- **Ochrana očí:**



Uzavřené ochranné brýle

9 Fyzikální a chemické vlastnosti

- **Informace o základních fyzikálních a chemických vlastnostech**
- **Všeobecné údaje**
- **Vzhled:**
Skupenství: Pevné

(pokračování na straně 5)

Bezpečnostní list podle 1907/2006/ES, Článek 31

Datum vydání: 31.12.2013

Revize: 31.12.2013

Obchodní označení: Paraformaldehyde, PRILLS

(pokračování strany 4)

Barva:	Bezbarvá
· Zápach (vůně):	Pichlavý
· Prahová hodnota zápachu:	Není určeno.
· Hodnota pH při 20 °C:	3,5
· Změna stavu	
Teplota (rozmezí teplot) tání:	120 °C
Teplota (rozmezí teplot) varu:	Není určena.
· Bod vzplanutí:	70 °C
· Zápalnost (tuhé, plynné skupenství):	Není určeno.
· Zápalná teplota:	300 °C
· Teplota rozkladu:	Není určeno.
· Samozápalnost:	Produkt není samozápalný.
· Nebezpečí exploze:	U produktu nehrozí nebezpečí exploze.
· Meze výbušnosti:	
Dolní mez:	7 Vol %
Horní mez:	73 Vol %
· Tenze par při 20 °C:	X hPa
· Hustota při 20 °C:	1,235 g/cm ³
· Relativní hustota	Není určeno.
· Hustota par	Nedá se použít.
· Rychlost odpařování	Nedá se použít.
· Rozpustnost ve / směřitelnost s vodě:	Nerozpustná.
· Rozdělovací koeficient n-oktanol/voda:	Není určeno.
· Viskozita:	
Dynamicky:	Nedá se použít.
Kinematicky:	Nedá se použít.
· Obsah ředidel:	
Organická ředidla:	0,0 %
Voda:	3,0 %
VOC (EC)	0,00 %
· Obsah netěkavých složek:	86,3 %
· Další informace	Další relevantní informace nejsou k dispozici.

10 Stálost a reaktivita

- **Reaktivita**
- **Chemická stabilita**
- **Termický rozklad / Podmínky, kterých je nutno se vyvarovat:**
Nedochází k rozkladu při doporučeném způsobu použití.
- **Možnost nebezpečných reakcí** Žádné nebezpečné reakce nejsou známy.
- **Podmínky, kterým je třeba zabránit** Další relevantní informace nejsou k dispozici.
- **Neslučitelné materiály:** Další relevantní informace nejsou k dispozici.

(pokračování na straně 6)

Bezpečnostní list

podle 1907/2006/ES, Článek 31

Datum vydání: 31.12.2013

Revize: 31.12.2013

Obchodní označení: Paraformaldehyd, PRILLS

· **Nebezpečné produkty rozkladu:** Nejsou známy žádné nebezpečné produkty při rozkladu.

(pokračování strany 5)

11 Toxikologické informace

- **Informace o toxikologických účincích**
- **Akutní toxicita:**

- **Zařazení relevantní hodnoty LD/LC 50:**

30525-89-4 paraformaldehyd

Orálně	LD50	800 mg/kg (Rat)
Pokožkou	LD50	10000 mg/kg (rabbit)
Inhalováním	LC50/4 h	1070 mg/l (Rat)

- **Primární dráždivé účinky:**
- **na kůži:** Dráždí kůži a sliznice.
- **na zrak:** Dráždivé účinky
- **Senzibilizace:** Vdechnutím je možná senzibilizace.
- **Doplňující toxikologická upozornění:**
Produkt poukazuje, na základě výpočtů všeobecných zařadovacích směrnic ES pro přípravky v posledním platném znění následující nebezpečí:
zdraví škodlivý
dráždivý

12 Ekologické informace

- **Toxicita**
- **Aquatická toxicita:** Další relevantní informace nejsou k dispozici.
- **Perzistence a rozložitelnost** Další relevantní informace nejsou k dispozici.
- **Chování v ekologickém prostředí:**
- **Bioakumulační potenciál** Další relevantní informace nejsou k dispozici.
- **Mobilita v půdě** Další relevantní informace nejsou k dispozici.
- **Další ekologické údaje:**
- **Všeobecná upozornění:**
Třída ohrožení vody 1 (Samozářazení): slabé ohrožení vody
Nesmí se dostat nezředěný nebo ve větším množství do spodní vody, povodí nebo kanalizace.
- **Výsledky posouzení PBT a vPvB**
- **PBT:** Nedá se použít.
- **vPvB:** Nedá se použít.
- **Jiné nepříznivé účinky** Další relevantní informace nejsou k dispozici.

13 Pokyny pro odstraňování

- **Metody nakládání s odpady**
- **Doporučení:** Nesmí se odstraňovat společně s odpady z domácnosti. Nepřipustit únik do kanalizace.
- **Kontaminované obaly:**
- **Doporučení:** Odstranění podle příslušných předpisů.

CZ

(pokračování na straně 7)

Bezpečnostní list

podle 1907/2006/ES, Článek 31


Datum vydání: 31.12.2013

Revize: 31.12.2013

Obchodní označení: Paraformaldehyde, PRILLS

(pokračování strany 6)

14 Informace pro přepravu

· Číslo OSN · ADR, IMDG, IATA	UN2213
· Náležitý název OSN pro zásilku · ADR · IMDG, IATA	2213 PARAFORMALDEHYD PARAFORMALDEHYDE
· Třída/třídy nebezpečnosti pro přepravu · ADR	
	
· třída	4.1 Hořlavé tuhé látky, samovolně se rozkládající látky a znečlivěné tuhé výbušné látky
· Etiketa	4.1
· IMDG, IATA · Class	4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
· Label	-
· Obalová skupina · ADR · IMDG, IATA	III odpadá
· Nebezpečnost pro životní prostředí: · Látka znečišťující moře:	Ne
· Zvláštní bezpečnostní opatření pro uživatele · Kemlerovo číslo: · EMS-skupina:	Varování: Hořlavé tuhé látky, samovolně se rozkládající látky a znečlivěné tuhé výbušné látky 40 F-A,S-G
· Hromadná přeprava podle přílohy II MARPOL73/78 a předpisu IBC	Nedá se použít.
· Přeprava/další údaje:	
· ADR · Omezené množství (LQ) · Přepravní kategorie · Kód omezení pro tunely:	LQ9 3 E
· UN "Model Regulation":	UN2213, PARAFORMALDEHYD, 4.1, III

15 Informace o předpisech

· Posouzení chemické bezpečnosti: Posouzení chemické bezpečnosti nebylo provedeno.

16 Další informace

Údaje se opírají o dnešní stav našich vědomostí, nepředstavují však záruku vlastností produktu a nevznikají tak žádné smluvní právní vztahy.

(pokračování na straně 8)

Bezpečnostní list
podle 1907/2006/ES, Článek 31

Datum vydání: 31.12.2013

Revize: 31.12.2013

Obchodní označení: Paraformaldehyde, PRILLS

(pokračování strany 7)

· Relevantní věty

- H228 Hořlavá tuhá látka.
H302 Zdraví škodlivý při požití.
H315 Dráždí kůži.
H319 Způsobuje vážné podráždění očí.
H334 Při vdechování může vyvolat příznaky alergie nebo astmatu nebo dýchací potíže.
H335 Může způsobit podráždění dýchacích cest.
R20 Zdraví škodlivý při vdechování.
R36/37/38 Dráždí oči, dýchací orgány a kůži.
R42 Může vyvolat senzibilizaci při vdechování.

· Zkratky a akronymy:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

CZ

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 31.12.2013

Herziening van: 31.12.2013

1 Identificatie van de stof of het mengsel en van de vennootschap/onderneming

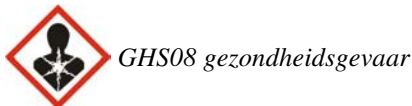
- **Productidentificatie**
- **Handelsnaam:** Paraformaldehyde, PRILLS
- **Artikelnummer:** 19200, 19202
- **Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**
Geen verdere relevante informatie verkrijgbaar.
- **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën
- **Details betreffende de verstrekker van het veiligheidsinformatieblad**
- **Fabrikant/leverancier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Aurion**
Binnenhaven 5
6709 PD Wageningen
The Netherlands
Tel: 31 317 415094
Fax: 31 317 415955
email: info@aurion.nl
- **Inlichtingengevende sector:** Product safety department
- **Telefoonnummer voor noodgevallen:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Identificatie van de gevaren

- **Indeling van de stof of het mengsel**
- **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



Flam. Sol. 2 H228 Ontvlambare vaste stof.



Resp. Sens. 1 H334 Kan bij inademing allergie- of astmasymptomen of ademhalingsmoeilijkheden veroorzaken.



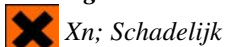
Acute Tox. 4 H302 Schadelijk bij inslikken.

Skin Irrit. 2 H315 Veroorzaakt huidirritatie.

Eye Irrit. 2 H319 Veroorzaakt ernstige oogirritatie.

STOT SE 3 H335 Kan irritatie van de luchtwegen veroorzaken.

- **Indeling overeenkomstig Richtlijn 67/548/EEG of Richtlijn 1999/45/EG**



R20: Schadelijk bij inademing.

(Vervolg op blz. 2)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 31.12.2013

Herziening van: 31.12.2013

Handelsnaam: Paraformaldehyde, PRILLS

(Vervolg van blz. 1)



Xi; Irriterend

R36/37/38: Irriterend voor de ogen, de ademhalingswegen en de huid.



Xn; Sensibiliserend

R42: Kan overgevoeligheid veroorzaken bij inademing.

- **Speciale gevaaromschrijving voor mens en milieu:**

Het product moet een markering krijgen op basis van het berekeningsproces van de "Algemene classificatierichtlijn voor bereidingen in de EG", laatste editie.

- **Classificatiesysteem:**

De Classificatie komt overeen met de actuele EG-lijsten, maar is aangevuld met gegevens uit de vakliteratuur en van de onderneming.

- **Etiketteringselementen**

- **Kentekening volgens EEG-richtlijnen:**

Het produkt is volgens de EG-richtlijnen/GefStoffV (de verordening inzake gevaarlijke stoffen) geclassificeerd en gekenmerkt.

- **Kenletter en gevaaromschrijving van het produkt:**



Xn Schadelijk

- **Gevaaraanduidende componenten voor de etikettering:**
paraformaldehyde

- **R-zinnen:**

20 Schadelijk bij inademing.

36/37/38 Irriterend voor de ogen, de ademhalingswegen en de huid.

42 Kan overgevoeligheid veroorzaken bij inademing.

- **S-zinnen:**

9 Op een goed geventileerde plaats bewaren.

22 Stof niet inademen.

45 Bij een ongeval of indien men zich onwel voelt, onmiddellijk een arts raadplegen (indien mogelijk hem dit etiket tonen).

60 Deze stof en de verpakking als gevaarlijk afval afvoeren.

- **Andere gevaren**

- **Resultaten van PBT- en zPzB-beoordeling**

- **PBT:** Niet bruikbaar.

- **zPzB:** Niet bruikbaar.

3 Samenstelling en informatie over de bestanddelen

- **Chemische karakterisering: Mengsels**

- **Beschrijving:** Mengsel van na elkaar aangevoerde stoffen met ongevaarlijke bijmengingen.

- **Gevaarlijke inhoudstoffen:**

30525-89-4	paraformaldehyde	50-100%
	Xn R20; Xi R36/37/38; Xn R42 Flam. Sol. 2, H228; Resp. Sens. 1, H334; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	

(Vervolg op blz. 3)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 31.12.2013

Herziening van: 31.12.2013

Handelsnaam: Paraformaldehyde, PRILLS

(Vervolg van blz. 2)

· **Aanvullende gegevens:**

De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.

4 Eerstehulpmaatregelen

· **Beschrijving van de eerstehulpmaatregelen**

· **Algemene informatie:**

Het is mogelijk dat vergiftigingssymptomen pas na vele uren optreden. Om deze reden is medische controle gedurende minstens 48 uur na een ongeval noodzakelijk.

· **Na het inademen:**

Frisse lucht toedienen, eventueel beademing, warmte. Wanneer de klachten niet ophouden, een arts raadplegen. Bij bewusteloosheid ligging en vervoer in stabiele zijligging.

· **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.

· **Na oogcontact:**

De ogen gedurende verscheidene minuten onder stromend water afspoelen terwijl de oogspleet geopend blijft. Bij aanhoudende klachten een dokter raadplegen.

· **Na inslikken:** Als de klachten niet minderen, een arts raadplegen

· **Informatie voor de arts:**

· **Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.

· **Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**

Geen verdere relevante informatie verkrijgbaar.

5 Brandbestrijdingsmaatregelen

· **Blusmiddelen**

· **Geschikte blusmiddelen:**

CO₂, bluspoeder of waterstraal. Grotere brand met waterstraal bestrijden of met schuim, dat tegen alcohol bestand is.

· **Speciale gevaren die door de stof of het mengsel worden veroorzaakt**

Geen verdere relevante informatie verkrijgbaar.

· **Advies voor brandweelieden**

· **Speciale beschermende kleding:** Ademhalingstoestel aantrekken.

6 Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

· **Persoonlijke voorzorgsmaatregelen, beschermde uitrusting en noodprocedures** Niet nodig.

· **Milieuvoorzorgsmaatregelen:** Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.

· **Insluitings- en reinigingsmethoden en -materiaal:**

Besmet materiaal zoals afval volgens punt 13 verwijderen.

Voor voldoende ventilatie zorgen.

· **Verwijzing naar andere rubrieken**

Informatie inzake veilig gebruik - zie hoofdstuk 7.

Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.

Informatie inzake berging - zie hoofdstuk 13.

7 Hantering en opslag

· **Handling:**

· **Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**

Goed stofvrij maken.

Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.

(Vervolg op blz. 4)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 31.12.2013

Herziening van: 31.12.2013

Handelsnaam: Paraformaldehyde, PRILLS

(Vervolg van blz. 3)

- Stofvorming vermijden.
- **Informatie m.b.t. brand- en ontploffingsgevaar:** Beschermen tegen hitte.
- **Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
- **Opslag:**
- **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.
- **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.
- **Verdere inlichtingen over eisen m.b.t. de opslag:**
 - Tanks ondoordringbaar gesloten houden.
 - Tegen hitte en directe zonnestralen beschermen.
- **Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

8 Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **Controleparameters**
- **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**
 - Het produkt bevat geen relevante hoeveelheden van stoffen, die met betrekking tot de werkplaatsen, qua grenswaarden gecontroleerd moeten worden.
- **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.
- **Maatregelen ter beheersing van blootstelling**
- **Persoonlijke beschermingsvoorzieningen:**
- **Algemene beschermings- en gezondheidsmaatregelen:**
 - Verwijderd houden van eet- en drinkwaren.
 - Verontreinigde kleding onmiddellijk uittrekken.
 - Vóór de pauze en aan het einde van werktijd handen wassen.
 - Aanraking met de ogen en de huid vermijden.
- **Ademhalingsbescherming:**
 - Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingsstoestel gebruiken.
- **Handbescherming:**



Veiligheidshandschoenen

Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.
Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliën-mengsel afgegeven worden.
Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.

- **Handschoenmateriaal**

De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant. Aangezien het product uit meerdere stoffen is samengesteld, is de duurzaamheid van de handschoenmaterialen niet vooraf berekenbaar en moet derhalve vóór het gebruik worden getest.

- **Doordringingstijd van het handschoenmateriaal**

De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.

(Vervolg op blz. 5)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 31.12.2013

Herziening van: 31.12.2013

Handelsnaam: Paraformaldehyde, PRILLS

(Vervolg van blz. 4)

· Oogbescherming:

Nauw aansluitende veiligheidsbril

9 Fysische en chemische eigenschappen

· Informatie over fysische en chemische basiseigenschappen**· Algemene gegevens****· Voorkomen:**

Vorm:	Vast
Kleur:	Kleurloos
Reuk:	Stekend
Geurdrempelwaarde:	Niet bepaald.

· pH-waarde bij 20 °C: 3,5**· Toestandsverandering**

Smeltpunt/smeltbereik:	120 °C
Kookpunt/kookpuntbereik:	Niet bepaald.

· Vlampunt: 70 °C**· Ontvlambaarheid (vast, gasvormig):** Niet bepaald.**· Ontstekingstemperatuur:** 300 °C**· Ontbindingstemperatuur:** Niet bepaald.**· Zelfonsteking:** Het produkt ontbrandt niet uit zichzelf.**· Ontploffingsgevaar:** Het produkt is niet ontploffingsgevaarlijk.**· Ontploffingsgrenzen:**

Onderste:	7 Vol %
Bovenste:	73 Vol %

· Dampspanning bij 20 °C: X hPa

· Dichtheid bij 20 °C:	1,235 g/cm ³
· Relatieve dichtheid	Niet bepaald.
· Dampdichtheid	Niet bruikbaar.
· Verdampingsnelheid	Niet bruikbaar.

· Oplosbaarheid in/mengbaarheid met Water: Niet oplosbaar.**· Verdelingscoëfficiënt (n-octanol/water):** Niet bepaald.**· Viscositeit**

Dynamisch:	Niet bruikbaar.
Kinematisch:	Niet bruikbaar.

· Oplosmiddelgehalte:

Organisch oplosmiddel:	0,0 %
Water:	3,0 %
VOC (EG)	0,00 %

Gehalte aan vaste bestanddelen: 86,3 %

(Vervolg op blz. 6)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 31.12.2013

Herziening van: 31.12.2013

Handelsnaam: Paraformaldehyde, PRILLS

(Vervolg van blz. 5)

· **Overige informatie** *Geen verdere relevante informatie verkrijgbaar.*

10 Stabiliteit en reactiviteit

- **Reactiviteit**
- **Chemische stabiliteit**
- **Thermische afbraak / te vermijden omstandigheden:** *Geen afbraak bij gebruik volgens voorschrift.*
- **Mogelijke gevaarlijke reacties** *Geen gevaarlijke reacties bekend.*
- **Te vermijden omstandigheden** *Geen verdere relevante informatie verkrijgbaar.*
- **Chemisch op elkaar inwerkende materialen:** *Geen verdere relevante informatie verkrijgbaar.*
- **Gevaarlijke ontledingsproducten:** *Geen gevaarlijke ontbindingsproducten bekend.*

11 Toxicologische informatie

- **Informatie over toxicologische effecten**
- **Acute toxiciteit:**

· **Indelingsrelevantie LD/LC50-waarden:**

30525-89-4 paraformaldehyde

Oraal	LD50	800 mg/kg (Rat)
Dermaal	LD50	10000 mg/kg (rabbit)
Inhalatief	LC50/4 h	1070 mg/l (Rat)

- **Primaire aandoening:**
- **op de huid:** *Prikkelt de huid en de slijmvliezen.*
- **aan het oog:** *Prikkeling*
- **Overgevoeligheid:** *Kan overgevoeligheid veroorzaken bij inademing.*
- **Aanvullende toxicologische informatie:**
Het produkt vertoont op grond van het berekeningsprocédé van de algemene classificatie-richtlijnen van de EG voor toebereidingen in de laatste geldige redactie de volgende gevaren:
Schadelijk
Irriterend

12 Ecologische informatie

- **Toxiciteit**
- **Aquatische toxiciteit:** *Geen verdere relevante informatie verkrijgbaar.*
- **Persistentie en afbreekbaarheid** *Geen verdere relevante informatie verkrijgbaar.*
- **Gedrag in milieu-compartimenten:**
- **Bioaccumulatie** *Geen verdere relevante informatie verkrijgbaar.*
- **Mobiliteit in de bodem** *Geen verdere relevante informatie verkrijgbaar.*
- **Verdere ecologische informatie:**
- **Algemene informatie:**
Waterbezwaarlijkheid (NL) 10: Kan in het aquatisch milieu op lange termijn schadelijke effecten veroorzaken.
Gevaar voor water klasse 1 (D) (Zelfclassificatie): gevaar voor water klein
Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.
- **Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** *Niet bruikbaar.*
- **zPzB:** *Niet bruikbaar.*

(Vervolg op blz. 7)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 31.12.2013

Herziening van: 31.12.2013

Handelsnaam: Paraformaldehyde, PRILLS


(Vervolg van blz. 6)

· **Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

13 Instructies voor verwijdering

- **Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.

14 Informatie met betrekking tot het vervoer

· VN-nummer	
· ADR, IMDG, IATA	UN2213
· Juiste ladingnaam overeenkomstig de modelreglementen van de VN	
· ADR	2213 PARAFORMALDEHYDE
· IMDG, IATA	PARAFORMALDEHYDE
· Transportgevarenklasse(n)	
· ADR	
	
· klasse	4.1 Brandbare vaste stoffen
· Etiket	4.1
· IMDG, IATA	
· Class	4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
· Label	-
· Verpakkingsgroep:	
· ADR	III
· IMDG, IATA	Niet van toepassing
· Milieugevaren:	
· Marine pollutant:	Neen
· Bijzondere voorzorgen voor de gebruiker	Waarschuwing: Brandbare vaste stoffen
· Kemler-getal:	40
· EMS-nummer:	F-A,S-G
· Vervoer in bulk overeenkomstig bijlage II bij MARPOL 73/78 en de IBC-code	Niet bruikbaar.
· Transport/verdere gegevens:	
· ADR	
· Beperkte hoeveelheden (LQ)	LQ9
· Vervoerscategorie	3
· Tunnelbeperkingscode	E

(Vervolg op blz. 8)

Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 31.12.2013

Herziening van: 31.12.2013

Handelsnaam: Paraformaldehyde, PRILLS

(Vervolg van blz. 7)

· VN "Model Regulation":	UN2213, PARAFORMALDEHYDE, 4.1, III
--------------------------	------------------------------------

15 Regelgeving

· **Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel**

· **SZW-lijst van kankerverwekkende stoffen**

geen der bestanddelen staat op de lijst.

· **SZW-lijst van mutagene stoffen**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding**

geen der bestanddelen staat op de lijst.

· **Nationale voorschriften:**

· **Gevaarklasse v. water:** Waterbezwaarlijkheid (NL) 10: Saneringsinspanning A

· **Chemischeveiligheidsbeoordeling:** Een chemische veiligheidsbeoordeling is niet uitgevoerd.

16 Overige informatie

Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van produkteigenschappen en vestigen geen contractuele rechtsbetrekking.

· **Relevante zinnen**

H228 Ontvlambare vaste stof.

H302 Schadelijk bij inslikken.

H315 Veroorzaakt huidirritatie.

H319 Veroorzaakt ernstige oogirritatie.

H334 Kan bij inademing allergie- of astmasymptomen of ademhalingsmoeilijkheden veroorzaken.

H335 Kan irritatie van de luchtwegen veroorzaken.

R20 Schadelijk bij inademing.

R36/37/38 Irriterend voor de ogen, de ademhalingswegen en de huid.

R42 Kan overgevoeligheid veroorzaken bij inademing.

· **Afkortingen en acroniemen:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 31.12.2013

Révision: 31.12.2013

1 Identification de la substance/du mélange et de la société/l'entreprise

- **Identificateur de produit**
- **Nom du produit:** Paraformaldehyde, PRILLS
- **Code du produit:** 19200, 19202
- **Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **Numéro d'appel d'urgence:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Identification des dangers

- **Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008**



GHS02 flamme

Flam. Sol. 2 H228 Matière solide inflammable.



GHS08 danger pour la santé

Resp. Sens. 1 H334 Peut provoquer des symptômes allergiques ou d'asthme ou des difficultés respiratoires par inhalation.



GHS07

Acute Tox. 4 H302 Nocif en cas d'ingestion.

Skin Irrit. 2 H315 Provoque une irritation cutanée.

Eye Irrit. 2 H319 Provoque une sévère irritation des yeux.

STOT SE 3 H335 Peut irriter les voies respiratoires.

- **Classification selon la directive 67/548/CEE ou directive 1999/45/CE**



Xn; Nocif

R20: Nocif par inhalation.



Xi; Irritant

R36/37/38: Irritant pour les yeux, les voies respiratoires et la peau.

(suite page 2)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 31.12.2013

Révision: 31.12.2013

Nom du produit: Paraformaldehyde, PRILLS

(suite de la page 1)



Xn; Sensibilisant

R42: Peut entraîner une sensibilisation par inhalation.

· Indications particulières concernant les dangers pour l'homme et l'environnement:

Le produit est à étiqueter, conformément au procédé de calcul de la "Directive générale de classification pour les préparations de la CE", dans la dernière version valable.

· Système de classification:

La classification correspond aux listes CEE actuelles et est complétée par des indications tirées de publications spécialisées et des indications fournies par l'entreprise.

· Éléments d'étiquetage

· Marquage selon les directives CEE:

Le produit est classé et identifié suivant les directives de la Communauté Européenne/la "GefStoffV"= la Réglementation sur les Produits dangereux.

· Lettre d'identification et caractérisation de danger du produit:



Xn Nocif

· Composants dangereux déterminants pour l'étiquetage:
paraformaldéhyde

· Phrases R:

- 20 Nocif par inhalation.
- 36/37/38 Irritant pour les yeux, les voies respiratoires et la peau.
- 42 Peut entraîner une sensibilisation par inhalation.

· Phrases S:

- 9 Conserver le récipient dans un endroit bien ventilé.
- 22 Ne pas respirer les poussières.
- 45 En cas d'accident ou de malaise, consulter immédiatement un médecin (si possible, lui montrer l'étiquette).
- 60 Éliminer le produit et son récipient comme un déchet dangereux.

· Autres dangers

· Résultats des évaluations PBT et vPvB

- **PBT:** Non applicable.
- **vPvB:** Non applicable.

3 Composition/informations sur les composants

· Caractérisation chimique: Mélanges

· Description: Mélange des substances mentionnées à la suite avec des additifs non dangereux.

· Composants dangereux:

30525-89-4	paraformaldéhyde	50-100%

· Indications complémentaires: Pour le libellé des phrases de risque citées, se référer au chapitre 16.

FR

(suite page 3)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 31.12.2013

Révision: 31.12.2013

Nom du produit: Paraformaldehyde, PRILLS

(suite de la page 2)

4 Premiers secours

- **Description des premiers secours**

- **Remarques générales:**

Les symptômes d'intoxication peuvent apparaître après de nombreuses heures seulement; une surveillance médicale est donc nécessaire au moins 48 heures après un accident.

- **Après inhalation:**

Donner de l'air frais. Assistance respiratoire si nécessaire. Tenir le malade au chaud. Si les troubles persistent, consulter un médecin.

En cas d'inconscience, coucher et transporter la personne en position latérale stable.

- **Après contact avec la peau:** Laver immédiatement à l'eau et au savon et bien rincer.

- **Après contact avec les yeux:**

Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières. Si les troubles persistent, consulter un médecin.

- **Après ingestion:** Si les troubles persistent, consulter un médecin.

- **Indications destinées au médecin:**

- **Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.

- **Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**

Pas d'autres informations importantes disponibles.

5 Mesures de lutte contre l'incendie

- **Moyens d'extinction**

- **Moyens d'extinction:**

CO₂, poudre d'extinction ou eau pulvérisée. Combattre les foyers importants avec de l'eau pulvérisée ou de la mousse résistant à l'alcool.

- **Dangers particuliers résultant de la substance ou du mélange** Pas d'autres informations importantes disponibles.

- **Conseils aux pompiers**

- **Équipement spécial de sécurité:** Porter un appareil de protection respiratoire.

6 Mesures à prendre en cas de dispersion accidentelle

- **Précautions individuelles, équipement de protection et procédures d'urgence** Pas nécessaire.

- **Précautions pour la protection de l'environnement:**

Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.

- **Méthodes et matériel de confinement et de nettoyage:**

Evacuer les matériaux contaminés en tant que déchets conformément au point 13.

Assurer une aération suffisante.

- **Référence à d'autres sections**

Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.

Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.

Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

7 Manipulation et stockage

- **Manipulation:**

- **Précautions à prendre pour une manipulation sans danger**

Bien dépoussiérer.

Veiller à une bonne ventilation/aspiration du poste de travail.

Éviter la formation de poussière.

- **Préventions des incendies et des explosions:** Tenir à l'abri de la chaleur.

(suite page 4)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 31.12.2013

Révision: 31.12.2013

Nom du produit: Paraformaldehyde, PRILLS

(suite de la page 3)

- **Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:**
Tenir les emballages hermétiquement fermés.
Protéger de la forte chaleur et du rayonnement direct du soleil.
- **Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

8 Contrôles de l'exposition/protection individuelle

- **Indications complémentaires pour l'agencement des installations techniques:**
Sans autre indication, voir point 7.
- **Paramètres de contrôle**
- **Composants présentant des valeurs-seuil à surveiller par poste de travail:**
Le produit ne contient pas en quantité significative des substances présentant des valeurs-seuil à surveiller par poste de travail.
- **Remarques supplémentaires:**
Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.
- **Contrôles de l'exposition**
- **Équipement de protection individuel:**
- **Mesures générales de protection et d'hygiène:**
Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.
Retirer immédiatement les vêtements souillés ou humectés.
Se laver les mains avant les pauses et en fin de travail.
Éviter tout contact avec les yeux et avec la peau.
- **Protection respiratoire:**
En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.
- **Protection des mains:**



Gants de protection

- Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.
À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.
Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.
- **Matériau des gants**
Le choix de gants appropriés dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.
 - **Temps de pénétration du matériau des gants**
Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

(suite page 5)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 31.12.2013

Révision: 31.12.2013

Nom du produit: Paraformaldehyde, PRILLS

(suite de la page 4)

· Protection des yeux:



Lunettes de protection hermétiques

9 Propriétés physiques et chimiques

· Informations sur les propriétés physiques et chimiques essentielles

· Indications générales

· Aspect:

Forme:	Solide
Couleur:	Incolore
Odeur:	Piquante
Seuil olfactif:	Non déterminé.

· valeur du pH à 20 °C: 3,5

· Changement d'état

Point de fusion:	120 °C
Point d'ébullition:	Non déterminé.

· Point d'éclair 70 °C

· Inflammabilité (solide, gazeux): Non déterminé.

· Température d'inflammation: 300 °C

· Température de décomposition: Non déterminé.

· Auto-inflammation: Le produit ne s'enflamme pas spontanément.

· Danger d'explosion: Le produit n'est pas explosif.

· Limites d'explosion:

Inférieure:	7 Vol %
Supérieure:	73 Vol %

· Pression de vapeur à 20 °C: X hPa

· Densité à 20 °C: 1,235 g/cm³

· Densité relative: Non déterminé.

· Densité de vapeur: Non applicable.

· Vitesse d'évaporation: Non applicable.

· Solubilité dans/miscibilité avec l'eau:

Insoluble

· Coefficient de partage (n-octanol/eau): Non déterminé.

· Viscosité:

Dynamique:	Non applicable.
Cinématique:	Non applicable.

· Teneur en solvants:

Solvants organiques:	0,0 %
Eau:	3,0 %
VOC (CE)	0,00 %

Teneur en substances solides: 86,3 %

(suite page 6)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 31.12.2013

Révision: 31.12.2013

Nom du produit: Paraformaldehyde, PRILLS

(suite de la page 5)

· **Autres informations**

Pas d'autres informations importantes disponibles.

10 Stabilité et réactivité

- **Réactivité**
- **Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** Pas de décomposition en cas d'usage conforme.
- **Possibilité de réactions dangereuses** Aucune réaction dangereuse connue.
- **Conditions à éviter** Pas d'autres informations importantes disponibles.
- **Matières incompatibles:** Pas d'autres informations importantes disponibles.
- **Produits de décomposition dangereux:** Pas de produits de décomposition dangereux connus

11 Informations toxicologiques

- **Informations sur les effets toxicologiques**
- **Toxicité aiguë:**

· **Valeurs LD/LC50 déterminantes pour la classification:**

30525-89-4 paraformaldéhyde

Oral	LD50	800 mg/kg (Rat)
Dermique	LD50	10000 mg/kg (lapin)
Inhalatoire	LC50/4 h	1070 mg/l (Rat)

- **Effet primaire d'irritation:**
- **de la peau:** Irrite la peau et les muqueuses.
- **des yeux:** Effet d'irritation.
- **Sensibilisation:** Sensibilisation possible par inhalation.
- **Indications toxicologiques complémentaires:**
Selon le procédé de calcul de la dernière version en vigueur de la directive générale CEE sur la classification des préparations, le produit présente les dangers suivants:
Nocif
Irritant

12 Informations écologiques

- **Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **Comportement dans les compartiments de l'environnement:**
- **Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **Mobilité dans le sol** Pas d'autres informations importantes disponibles.
- **Autres indications écologiques:**
- **Indications générales:**
Catégorie de pollution des eaux 1 (D) (Classification propre): peu polluant
Ne pas laisser le produit, non dilué ou en grande quantité, pénétrer la nappe phréatique, les eaux ou les canalisations.
- **Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.

(suite page 7)

Fiche de données de sécurité
selon 1907/2006/CE, Article 31

Date d'impression : 31.12.2013

Révision: 31.12.2013

Nom du produit: Paraformaldehyde, PRILLS


(suite de la page 6)

· **Autres effets néfastes** Pas d'autres informations importantes disponibles.

13 Considérations relatives à l'élimination

- **Méthodes de traitement des déchets**
- **Recommandation:** Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.
- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.

14 Informations relatives au transport

· No ONU · ADR, IMDG, IATA	UN2213
· Nom d'expédition des Nations unies · ADR · IMDG, IATA	2213 PARAFORMALDÉHYDE PARAFORMALDEHYDE
· Classe(s) de danger pour le transport · ADR	
	
· Classe · Étiquette	4.1 Matières solides inflammables, matières autoréactives et matières explosibles désensibilisées solides. 4.1
· IMDG, IATA · Class · Label	4.1 Flammable solids, self-reactive substances and solid desensitized explosives. -
· Groupe d'emballage · ADR · IMDG, IATA	III néant
· Dangers pour l'environnement: · Marine Pollutant:	Non
· Précautions particulières à prendre par l'utilisateur · Indice Kemler: · No EMS:	Attention: Matières solides inflammables, matières autoréactives et matières explosibles désensibilisées solides. 40 F-A,S-G
· Transport en vrac conformément à l'annexe II de la convention Marpol 73/78 et au recueil IBC	Non applicable.
· Indications complémentaires de transport:	
· ADR · Quantités limitées (LQ) · Catégorie de transport	LQ9 3

(suite page 8)

Fiche de données de sécurité

selon 1907/2006/CE, Article 31

Date d'impression : 31.12.2013

Révision: 31.12.2013

Nom du produit: Paraformaldehyde, PRILLS

(suite de la page 7)

· Code de restriction en tunnels	E
· "Règlement type" de l'ONU:	UN2213, PARAFORMALDÉHYDE, 4.1, III

15 Informations réglementaires

- **Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

16 Autres informations

Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.

- **Phrases importantes**

- H228 Matière solide inflammable.
 H302 Nocif en cas d'ingestion.
 H315 Provoque une irritation cutanée.
 H319 Provoque une sévère irritation des yeux.
 H334 Peut provoquer des symptômes allergiques ou d'asthme ou des difficultés respiratoires par inhalation.
 H335 Peut irriter les voies respiratoires.

- R20 Nocif par inhalation.
 R36/37/38 Irritant pour les yeux, les voies respiratoires et la peau.
 R42 Peut entraîner une sensibilisation par inhalation.

- **Acronymes et abréviations:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 31.12.2013

überarbeitet am: 31.12.2013

1 Bezeichnung des Stoffs bzw. des Gemischs und des Unternehmens

- **Produktidentifikator**
- **Handelsname:** Paraformaldehyde, PRILLS
- **Artikelnummer:** 19200, 19202
- **Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**
Keine weiteren relevanten Informationen verfügbar.
- **Verwendung des Stoffes / des Gemisches** Laborchemikalien
- **Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**
- **Hersteller/Lieferant:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com

Science Services
Goerzer Strasse 70
81549 München Germany
Tel: +49(0)89 159802 80
safety@scienceservices.de

24h Giftnotruf Munchen: +49 (0)89 19240
Toxikologische Abteilung der II. Medizinischen Klinik
rechts der Isar, Munchen. - www.toxinfo.org
- **Auskunftgebender Bereich:** Product safety department
- **Notrufnummer:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Mögliche Gefahren

- **Einstufung des Stoffs oder Gemischs**
- **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**



GHS02 Flamme

Flam. Sol. 2 H228 Entzündbarer Feststoff.



GHS08 Gesundheitsgefahr

Resp. Sens. 1 H334 Kann bei Einatmen Allergie, asthmaartige Symptome oder Atembeschwerden verursachen.



GHS07

Acute Tox. 4 H302 Gesundheitsschädlich bei Verschlucken.

Skin Irrit. 2 H315 Verursacht Hautreizungen.

Eye Irrit. 2 H319 Verursacht schwere Augenreizung.

STOT SE 3 H335 Kann die Atemwege reizen.

(Fortsetzung auf Seite 2)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31


Druckdatum: 31.12.2013

überarbeitet am: 31.12.2013


Handelsname: Paraformaldehyde, PRILLS

(Fortsetzung von Seite 1)

· **Einstufung gemäß Richtlinie 67/548/EWG oder Richtlinie 1999/45/EG**

 Xn; Gesundheitsschädlich

R20: Gesundheitsschädlich beim Einatmen.

 Xi; Reizend

R36/37/38: Reizt die Augen, die Atmungsorgane und die Haut.

 Xn; Sensibilisierend

R42: Sensibilisierung durch Einatmen möglich.

· **Besondere Gefahrenhinweise für Mensch und Umwelt:**

Das Produkt ist kennzeichnungspflichtig auf Grund des Berechnungsverfahrens der "Allgemeinen Einstufungsrichtlinie für Zubereitungen der EG" in der letztgültigen Fassung.

· **Klassifizierungssystem:**


Die Klassifizierung entspricht den aktuellen EG-Listen, ist jedoch ergänzt durch Angaben aus der Fachliteratur und durch Firmenangaben.

· **Kennzeichnungselemente**

· **Kennzeichnung nach EWG-Richtlinien:**

Das Produkt ist nach EG-Richtlinien/GefStoffV eingestuft und gekennzeichnet.

· **Kennbuchstabe und Gefahrenbezeichnung des Produktes:**

 Xn Gesundheitsschädlich

· **Gefahrbestimmende Komponenten zur Etikettierung:**

Paraformaldehyd

· **R-Sätze:**

20 Gesundheitsschädlich beim Einatmen.
36/37/38 Reizt die Augen, die Atmungsorgane und die Haut.
42 Sensibilisierung durch Einatmen möglich.

· **S-Sätze:**

9 Behälter an einem gut gelüfteten Ort aufbewahren.
22 Staub nicht einatmen.
45 Bei Unfall oder Unwohlsein sofort Arzt zuziehen (wenn möglich, dieses Etikett vorzeigen).
60 Dieses Produkt und sein Behälter sind als gefährlicher Abfall zu entsorgen.

· **Sonstige Gefahren**

· **Ergebnisse der PBT- und vPvB-Beurteilung**

· **PBT:** Nicht anwendbar.
· **vPvB:** Nicht anwendbar.

3 Zusammensetzung/Angaben zu Bestandteilen

· **Chemische Charakterisierung: Gemische**

· **Beschreibung:** Gemisch aus nachfolgend angeführten Stoffen mit ungefährlichen Beimengungen.

· **Gefährliche Inhaltsstoffe:**

(Fortsetzung auf Seite 3)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 31.12.2013

überarbeitet am: 31.12.2013

Handelsname: Paraformaldehyde, PRILLS

30525-89-4	Paraformaldehyd 	(Fortsetzung von Seite 2) 50-100%
------------	----------------------------	--------------------------------------

· **Zusätzliche Hinweise:** Der Wortlaut der angeführten Gefahrenhinweise ist dem Abschnitt 16 zu entnehmen.

4 Erste-Hilfe-Maßnahmen

- **Beschreibung der Erste-Hilfe-Maßnahmen**
- **Allgemeine Hinweise:**
Vergiftungssymptome können erst nach vielen Stunden auftreten, deshalb ärztliche Überwachung mindestens 48 Stunden nach einem Unfall.
- **Nach Einatmen:**
Frischlufzufuhr, gegebenenfalls Atemspende, Wärme. Bei anhaltenden Beschwerden Arzt konsultieren.
Bei Bewußtlosigkeit Lagerung und Transport in stabiler Seitenlage.
- **Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.
- **Nach Augenkontakt:**
Augen mehrere Minuten bei geöffnetem Lidspalt unter fließendem Wasser spülen. Bei anhaltenden Beschwerden Arzt konsultieren.
- **Nach Verschlucken:** Bei anhaltenden Beschwerden Arzt konsultieren.
- **Hinweise für den Arzt:**
- **Wichtigste akute und verzögert auftretende Symptome und Wirkungen**
Keine weiteren relevanten Informationen verfügbar.
- **Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung** Keine weiteren relevanten Informationen verfügbar.

5 Maßnahmen zur Brandbekämpfung

- **Löschmittel**
- **Geeignete Löschmittel:**
CO₂, Löschpulver oder Wassersprühstrahl. Größeren Brand mit Wassersprühstrahl oder alkoholbeständigem Schaum bekämpfen.
- **Besondere vom Stoff oder Gemisch ausgehende Gefahren** Keine weiteren relevanten Informationen verfügbar.
- **Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Atemschutzgerät anlegen.

6 Maßnahmen bei unbeabsichtigter Freisetzung

- **Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**
Nicht erforderlich.
- **Umweltschutzmaßnahmen:** Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.
- **Methoden und Material für Rückhaltung und Reinigung:**
Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.
Für ausreichende Lüftung sorgen.
- **Verweis auf andere Abschnitte**
Informationen zur sicheren Handhabung siehe Abschnitt 7.
Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.
Informationen zur Entsorgung siehe Abschnitt 13.

DE

(Fortsetzung auf Seite 4)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 31.12.2013

überarbeitet am: 31.12.2013

Handelsname: Paraformaldehyde, PRILLS

(Fortsetzung von Seite 3)

7 Handhabung und Lagerung

- **Handhabung:**
- **Schutzmaßnahmen zur sicheren Handhabung**
Gute Entstaubung.
Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.
Staubbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:** Vor Hitze schützen.
- **Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:**
Behälter dicht geschlossen halten.
Vor Hitze und direkter Sonnenbestrahlung schützen.
- **Lagerklasse:**
- **Klassifizierung nach Betriebsicherheitsverordnung (BetrSichV):** -
- **Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

8 Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.
- **Zu überwachende Parameter**
- **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**
Das Produkt enthält keine relevanten Mengen von Stoffen mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten.
- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.
- **Begrenzung und Überwachung der Exposition**
- **Persönliche Schutzausrüstung:**
- **Allgemeine Schutz- und Hygienemaßnahmen:**
Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.
Beschmutzte, getränkte Kleidung sofort ausziehen.
Vor den Pausen und bei Arbeitsende Hände waschen.
Berührung mit den Augen und der Haut vermeiden.
- **Atemschutz:**
Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition unluftunabhängiges Atemschutzgerät verwenden.
- **Handschutz:**



Schutzhandschuhe

Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein. Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.

Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.

- **Handschuhmaterial**

(Fortsetzung auf Seite 5)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 31.12.2013

überarbeitet am: 31.12.2013

Handelsname: Paraformaldehyde, PRILLS

(Fortsetzung von Seite 4)

Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialien nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.

· **Durchdringungszeit des Handschuhmaterials**

Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.

· **Augenschutz:**



Dichtschließende Schutzbrille

9 Physikalische und chemische Eigenschaften

· **Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**

· **Allgemeine Angaben**

· **Aussehen:**

· Form:	Fest
· Farbe:	Farblos
· Geruch:	Stechend
· Geruchsschwelle:	Nicht bestimmt.

· **pH-Wert bei 20 °C:** 3,5

· **Zustandsänderung**

· Schmelzpunkt/Schmelzbereich:	120 °C
· Siedepunkt/Siedebereich:	Nicht bestimmt.

· **Flammpunkt:** 70 °C

· **Entzündlichkeit (fest, gasförmig):** Nicht bestimmt.

· **Zündtemperatur:** 300 °C

· **Zersetzungstemperatur:** Nicht bestimmt.

· **Selbstentzündlichkeit:** Das Produkt ist nicht selbstentzündlich.

· **Explosionsgefahr:** Das Produkt ist nicht explosionsgefährlich.

· **Explosionsgrenzen:**

· Untere:	7 Vol %
· Obere:	73 Vol %

· **Dampfdruck bei 20 °C:** X hPa

· Dichte bei 20 °C:	1,235 g/cm ³
· Relative Dichte	Nicht bestimmt.
· Dampfdichte	Nicht anwendbar.
· Verdampfungsgeschwindigkeit	Nicht anwendbar.

· **Löslichkeit in / Mischbarkeit mit**

· **Wasser:** Unlöslich.

· **Verteilungskoeffizient (n-Octanol/Wasser):** Nicht bestimmt.

· **Viskosität:**

· **Dynamisch:** Nicht anwendbar.

(Fortsetzung auf Seite 6)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 31.12.2013

überarbeitet am: 31.12.2013

Handelsname: Paraformaldehyde, PRILLS

(Fortsetzung von Seite 5)

Kinematisch:	Nicht anwendbar.
· Lösemittelgehalt:	
Organische Lösemittel:	0,0 %
Wasser:	3,0 %
VOC (EU)	0,00 %
Festkörpergehalt:	86,3 %
· Sonstige Angaben	Keine weiteren relevanten Informationen verfügbar.

10 Stabilität und Reaktivität

- **Reaktivität**
- **Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.
- **Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

11 Toxikologische Angaben

- **Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität:**

· Einstufungsrelevante LD/LC50-Werte:		
30525-89-4 Paraformaldehyd		
Oral	LD50	800 mg/kg (Rat)
Dermal	LD50	10000 mg/kg (rabbit)
Inhalativ	LC50/4 h	1070 mg/l (Rat)

- **Primäre Reizwirkung:**
- **an der Haut:** Reizt die Haut und die Schleimhäute.
- **am Auge:** Reizwirkung.
- **Sensibilisierung:** Durch Einatmen Sensibilisierung möglich.
- **Zusätzliche toxikologische Hinweise:**
Das Produkt weist aufgrund des Berechnungsverfahrens der Allgemeinen Einstufungsrichtlinie der EG für Zubereitungen in der letztgültigen Fassung folgende Gefahren auf:
Gesundheitsschädlich
Reizend

12 Umweltbezogene Angaben

- **Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **Verhalten in Umweltkompartimenten:**
- **Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.

(Fortsetzung auf Seite 7)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 31.12.2013

überarbeitet am: 31.12.2013

Handelsname: Paraformaldehyde, PRILLS


(Fortsetzung von Seite 6)

- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**
Wassergefährdungsklasse 1 (Selbsteinstufung): schwach wassergefährdend
Nicht unverdünnt bzw. in größeren Mengen in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.
- **Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.
- **Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

13 Hinweise zur Entsorgung

- **Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.

14 Angaben zum Transport

<ul style="list-style-type: none"> · UN-Nummer · ADR, IMDG, IATA 	UN2213
<ul style="list-style-type: none"> · Ordnungsgemäße UN-Versandbezeichnung · ADR · IMDG, IATA 	2213 PARAFORMALDEHYD PARAFORMALDEHYDE
<ul style="list-style-type: none"> · Transportgefahrenklassen · ADR 	4.1 Entzündbare feste Stoffe, selbstzersetzliche Stoffe und desensibilisierte explosive feste Stoffe
<div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Klasse · Gefahrzettel 	4.1 4.1
<ul style="list-style-type: none"> · IMDG, IATA · Class · Label 	4.1 Flammable solids, self-reactive substances and solid desensitized explosives. -
<ul style="list-style-type: none"> · Verpackungsgruppe · ADR · IMDG, IATA 	III entfällt
<ul style="list-style-type: none"> · Umweltgefahren: · Marine pollutant: 	Nein
<ul style="list-style-type: none"> · Besondere Vorsichtsmaßnahmen für den Verwender · Kemler-Zahl: 	Achtung: Entzündbare feste Stoffe, selbstzersetzliche Stoffe und desensibilisierte explosive feste Stoffe 40

(Fortsetzung auf Seite 8)

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 31.12.2013

überarbeitet am: 31.12.2013

Handelsname: Paraformaldehyde, PRILLS

(Fortsetzung von Seite 7)

· EMS-Nummer:	F-A,S-G
· Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens 73/78 und gemäß IBC-Code	Nicht anwendbar.
· Transport/weitere Angaben:	
· ADR	
· Begrenzte Menge (LQ)	LQ9
· Beförderungskategorie	3
· Tunnelbeschränkungscode	E
· UN "Model Regulation":	UN2213, PARAFORMALDEHYD, 4.1, III

15 Rechtsvorschriften

- **Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**
- **Nationale Vorschriften:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV): -**
- **Wassergefährdungsklasse: WGK I (Selbsteinstufung):** schwach wassergefährdend.
- **Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

16 Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

· **Relevante Sätze**

- H228 Entzündbarer Feststoff.
 H302 Gesundheitsschädlich bei Verschlucken.
 H315 Verursacht Hautreizungen.
 H319 Verursacht schwere Augenreizung.
 H334 Kann bei Einatmen Allergie, asthmaartige Symptome oder Atembeschwerden verursachen.
 H335 Kann die Atemwege reizen.

- R20 Gesundheitsschädlich beim Einatmen.
 R36/37/38 Reizt die Augen, die Atmungsorgane und die Haut.
 R42 Sensibilisierung durch Einatmen möglich.

· **Abkürzungen und Akronyme:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 31.12.2013

Revisione: 31.12.2013

1 Identificazione della sostanza o della miscela e della società/impresa

- **Identificatore del prodotto**
- **Denominazione commerciale:** Paraformaldehide, PRILLS
- **Articolo numero:** 19200, 19202
- **Usi pertinenti identificati della sostanza o miscela e usi sconsigliati** Non sono disponibili altre informazioni.
- **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio
- **Informazioni sul fornitore della scheda di dati di sicurezza**
- **Produttore/fornitore:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Societa Italiana Chimici**
Via Rio Nell Ellba 140
00138 Rome, Italy
Tel: 39 06 8800211
Fax: 39 30 06 8815313
Web: www.sichim.com
- **Informazioni fornite da:** Product safety department
- **Numero telefonico di emergenza:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Identificazione dei pericoli

- **Classificazione della sostanza o della miscela**
- **Classificazione secondo il regolamento (CE) n. 1272/2008**



GHS02 fiamma

Flam. Sol. 2 H228 Solido infiammabile.



GHS08 pericolo per la salute

Resp. Sens. 1 H334 Può provocare sintomi allergici o asmatici o difficoltà respiratorie se inalato.



GHS07

Acute Tox. 4 H302 Nocivo se ingerito.

Skin Irrit. 2 H315 Provoca irritazione cutanea.

Eye Irrit. 2 H319 Provoca grave irritazione oculare.

STOT SE 3 H335 Può irritare le vie respiratorie.

- **Classificazione secondo la direttiva 67/548/CEE o direttiva 1999/45/CE**



Xn; Nocivo

R20: Nocivo per inalazione.

(continua a pagina 2)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 31.12.2013

Revisione: 31.12.2013

Denominazione commerciale: Paraformaldeide, PRILLS

(Segue da pagina 1)

**Xi; Irritante**

R36/37/38: Irritante per gli occhi, le vie respiratorie e la pelle.

**Xn; Sensibilizzante**

R42: Può provocare sensibilizzazione per inalazione.

Indicazioni di pericolosità specifiche per l'uomo e l'ambiente:

Il prodotto ha l'obbligo di classificazione in base al metodo di calcolo della "direttiva generale della Comunità sulla classificazione dei preparati" nella sua ultima versione valida.

Sistema di classificazione:

La classificazione corrisponde alle attuali liste della CEE, è tuttavia integrata da dati raccolti da bibliografia specifica e da dati forniti dall'impresa.

Elementi dell'etichetta**Classificazione secondo le direttive CEE:**

Il prodotto è classificato e codificato conformemente alle direttive CEE/norme sulle sostanze pericolose

Sigla ed etichettatura di pericolosità del prodotto:**Xn Nocivo****Componenti pericolosi che ne determinano l'etichettatura:**
paraformaldeide**Natura dei rischi specifici (frasi R):**

20 Nocivo per inalazione.

36/37/38 Irritante per gli occhi, le vie respiratorie e la pelle.

42 Può provocare sensibilizzazione per inalazione.

Consigli di prudenza (frasi S):

9 Conservare il recipiente in luogo ben ventilato.

22 Non respirare le polveri.

45 In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli l'etichetta).

60 Questo materiale e il suo contenitore devono essere smaltiti come rifiuti pericolosi.

Altri pericoli**Risultati della valutazione PBT e vPvB****PBT:** Non applicabile.**vPvB:** Non applicabile.

3 Composizione/informazioni sugli ingredienti

Caratteristiche chimiche: Miscela**Descrizione:** Miscela delle seguenti sostanze con additivi non pericolosi.**Sostanze pericolose:**

30525-89-4	paraformaldeide	50-100%
	Xn R20; Xi R36/37/38; Xn R42	
	Flam. Sol. 2, H228; Resp. Sens. 1, H334; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	

Ulteriori indicazioni: Il testo dell'avvertenza dei pericoli citati può essere appreso dal capitolo 16

IT

(continua a pagina 3)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 31.12.2013

Revisione: 31.12.2013

Denominazione commerciale: Paraformaldehide, PRILLS

(Segue da pagina 2)

4 Misure di primo soccorso

· **Descrizione delle misure di primo soccorso**

· **Indicazioni generali:**

I sintomi di avvelenamento possono comparire dopo molte ore, per tale motivo è necessaria la sorveglianza di un medico nelle 48 ore successive all'incidente.

· **Inalazione:**

Portare in zona ben areata, praticare eventualmente la respirazione artificiale, tenere al caldo. Se i disturbi persistono consultare il medico.

Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.

· **Contatto con la pelle:** *Lavare immediatamente con acqua e sapone sciacquando accuratamente.*

· **Contatto con gli occhi:**

Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte. Se persiste il dolore consultare il medico.

· **Ingestione:** *Se il dolore persiste consultare il medico.*

· **Indicazioni per il medico:**

· **Principali sintomi ed effetti, sia acuti che ritardati** *Non sono disponibili altre informazioni.*

· **Indicazione della eventuale necessità di consultare immediatamente un medico e di trattamenti speciali** *Non sono disponibili altre informazioni.*

5 Misure antincendio

· **Mezzi di estinzione**

· **Mezzi di estinzione idonei:**

CO₂, polvere o acqua nebulizzata. Estinguere gli incendi di grosse dimensioni con acqua nebulizzata o con schiuma resistente all'alcool.

· **Pericoli speciali derivanti dalla sostanza o dalla miscela** *Non sono disponibili altre informazioni.*

· **Raccomandazioni per gli addetti all'estinzione degli incendi**

· **Mezzi protettivi specifici:** *Indossare il respiratore.*

6 Misure in caso di rilascio accidentale

· **Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza** *Non necessario.*

· **Precauzioni ambientali:** *Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.*

· **Metodi e materiali per il contenimento e per la bonifica:**

Smaltimento del materiale contaminato conformemente al punto 13.

Provvedere ad una sufficiente areazione.

· **Riferimento ad altre sezioni**

Per informazioni relative ad un manipolazione sicura, vedere capitolo 7.

Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.

Per informazioni relative allo smaltimento vedere Capitolo 13.

7 Manipolazione e immagazzinamento

· **Manipolazione:**

· **Precauzioni per la manipolazione sicura**

Accurata captazione delle polveri.

Accurata ventilazione/aspirazione nei luoghi di lavoro.

Evitare la formazione di polvere.

· **Indicazioni in caso di incendio ed esplosione:** *Proteggere dal calore.*

(continua a pagina 4)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 31.12.2013

Revisione: 31.12.2013

Denominazione commerciale: Paraformaldehide, PRILLS

(Segue da pagina 3)

- **Condizioni per l'immagazzinamento sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.
- **Indicazioni sullo stoccaggio misto:** Non necessario.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:**
Mantenere i recipienti ermeticamente chiusi.
Proteggere dal calore e dai raggi diretti del sole.
- **Usi finali specifici** Non sono disponibili altre informazioni.

8 Controllo dell'esposizione/protezione individuale

- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.
- **Parametri di controllo**
- **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**
Il prodotto non contiene quantità rilevanti di sostanze i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro.
- **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.
- **Controlli dell'esposizione**
- **Mezzi protettivi individuali:**
- **Norme generali protettive e di igiene del lavoro:**
Tenere lontano da cibo, bevande e foraggi.
Togliere immediatamente gli abiti contaminati.
Lavarsi le mani prima dell'intervallo o a lavoro terminato.
Evitare il contatto con gli occhi e la pelle.
- **Maschera protettiva:**
Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.
- **Guanti protettivi:**



Guanti protettivi

Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.

A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.

Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.

- **Materiale dei guanti**

La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro. Poiché il prodotto rappresenta una formulazione di più sostanze, la stabilità dei materiali dei guanti non è calcolabile in anticipo e deve essere testata prima dell'impiego

- **Tempo di permeazione del materiale dei guanti**

Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.

(continua a pagina 5)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 31.12.2013

Revisione: 31.12.2013

Denominazione commerciale: Paraformaldehide, **PRILLS**

(Segue da pagina 4)

· Occhiali protettivi:



Occhiali protettivi a tenuta

9 Proprietà fisiche e chimiche

· Informazioni sulle proprietà fisiche e chimiche fondamentali

· Indicazioni generali

· Aspetto:

Forma:	Solido
Colore:	Incolore
· Odore:	Pungente
· Soglia olfattiva:	Non definito.

· valori di pH a 20 °C: 3,5

· Cambiamento di stato

Temperatura di fusione/ambito di fusione:	120 °C
Temperatura di ebollizione/ambito di ebollizione:	Non definito.

· Punto di infiammabilità: 70 °C

· Infiammabilità (solido, gassoso): Non definito.

· Temperatura di accensione: 300 °C

· Temperatura di decomposizione: Non definito.

· Autoaccensione: Prodotto non autoinfiammabile.

· Pericolo di esplosione: Prodotto non esplosivo.

· Limiti di infiammabilità:

Inferiore:	7 Vol %
Superiore:	73 Vol %

· Tensione di vapore a 20 °C: X hPa

· Densità a 20 °C: 1,235 g/cm³

· Densità relativa: Non definito.

· Densità del vapore: Non applicabile.

· Velocità di evaporazione: Non applicabile.

· Solubilità in/Miscibilità con acqua:

Insolubile.

· Coefficiente di distribuzione (n-Octanol/acqua): Non definito.

· Viscosità:

Dinamica:	Non applicabile.
Cinematica:	Non applicabile.

· Tenore del solvente:

Solventi organici:	0,0 %
Acqua:	3,0 %
VOC (CE)	0,00 %

· Contenuto solido: 86,3 %

(continua a pagina 6)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 31.12.2013

Revisione: 31.12.2013

Denominazione commerciale: Paraformaldeide, PRILLS

(Segue da pagina 5)

· **Altre informazioni**

Non sono disponibili altre informazioni.

10 Stabilità e reattività

- **Reattività**
- **Stabilità chimica**
- **Decomposizione termica/ condizioni da evitare:** Il prodotto non si decompone se utilizzato secondo le norme.
- **Possibilità di reazioni pericolose** Non sono note reazioni pericolose.
- **Condizioni da evitare** Non sono disponibili altre informazioni.
- **Materiali incompatibili:** Non sono disponibili altre informazioni.
- **Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

11 Informazioni tossicologiche

- **Informazioni sugli effetti tossicologici**
- **Tossicità acuta:**

· **Valori LD/LC50 rilevanti per la classificazione:**

30525-89-4 paraformaldeide

Orale	LD50	800 mg/kg (Rat)
Cutaneo	LD50	10000 mg/kg (rabbit)
Per inalazione	LC50/4 h	1070 mg/l (Rat)

- **Irritabilità primaria:**
- **sulla pelle:** Irrita la pelle e le mucose.
- **sugli occhi:** Irritante.
- **Sensibilizzazione:** Può provocare sensibilizzazione se inalato.
- **Ulteriori dati tossicologici:**
Il prodotto, in base al metodo di calcolo della direttiva generale della Comunità sulla classificazione dei preparati nella sua ultima versione valida, presenta i seguenti rischi:
Nocivo
Irritante

12 Informazioni ecologiche

- **Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **Comportamento in compartimenti ecologici:**
- **Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**
Pericolosità per le acque classe 1 (D) (Autoclassificazione): poco pericoloso
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.
- **Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.

(continua a pagina 7)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 31.12.2013

Revisione: 31.12.2013

Denominazione commerciale: Paraformaldehide, PRILLS


(Segue da pagina 6)

· **Altri effetti avversi** Non sono disponibili altre informazioni.

13 Considerazioni sullo smaltimento

- **Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.

14 Informazioni sul trasporto

· Numero ONU · ADR, IMDG, IATA	UN2213
· Nome di spedizione dell'ONU · ADR · IMDG, IATA	2213 PARAFORMALDEIDE PARAFORMALDEHYDE
· Classi di pericolo connesso al trasporto · ADR	
	
· Classe · Etichetta	4.1 Solidi infiammabili, materie autoreattive ed esplosivi solidi desensibilizzati 4.1
· IMDG, IATA · Class · Label	4.1 Flammable solids, self-reactive substances and solid desensitised explosives. -
· Gruppo di imballaggio · ADR · IMDG, IATA	III non applicabile
· Pericoli per l'ambiente: · Marine pollutant:	No
· Precauzioni speciali per gli utilizzatori · Numero Kemler: · Numero EMS:	Attenzione: Solidi infiammabili, materie autoreattive ed esplosivi solidi desensibilizzati 40 F-A,S-G
· Trasporto di rinfuse secondo l'allegato II di MARPOL 73/78 ed il codice IBC	Non applicabile.
· Trasporto/ulteriori indicazioni:	
· ADR · Quantità limitate (LQ) · Categoria di trasporto · Codice di restrizione in galleria	LQ9 3 E

(continua a pagina 8)

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 31.12.2013

Revisione: 31.12.2013

Denominazione commerciale: Paraformaldehide, PRILLS

(Segue da pagina 7)

· **UN "Model Regulation":** UN2213, PARAFORMALDEIDE, 4.1, III

15 Informazioni sulla regolamentazione

· **Valutazione della sicurezza chimica:** Una valutazione della sicurezza chimica non è stata effettuata.

16 Altre informazioni

I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.

· **Frase rilevanti**

H228 Solido infiammabile.
 H302 Nocivo se ingerito.
 H315 Provoca irritazione cutanea.
 H319 Provoca grave irritazione oculare.
 H334 Può provocare sintomi allergici o asmatici o difficoltà respiratorie se inalato.
 H335 Può irritare le vie respiratorie.

R20 Nocivo per inalazione.
 R36/37/38 Irritante per gli occhi, le vie respiratorie e la pelle.
 R42 Può provocare sensibilizzazione per inalazione.

· **Abbreviazioni e acronimi:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

IT

안전지침서

제31조의 1907/2006/EC에 따라

기압 점: 2013.12.31

개정: 2013.12.31

1 화학제품과 회사에 관한 정보

- 제품 식별자
- 제품명: **Paraformaldehyde, PRILLS**
- 상품 번호: 19200, 19202
- 해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도 추가적인 정보가 존재하지 않습니다.
- 제품의 권고 용도와 사용상의 제한: 실험실화학품
- 안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보
- 제조자/수입자/유통업자 정보:
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- Samchang Commercial Co., Ltd.
Yeo Eui Do
PO Box 1110
Seoul, Korea
Tel: 82 2 703 3040
Fax: 82 2 717 3298
- 추가적인 정보 획득 가능: Product safety department
- 비상연락 전화번호:
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 유해성.위험성

- 순물질 또는 혼합물의 분류



GHS02 화염

H228 인화성고체



GHS08 건강에 위험

H334 흡입시 알레르기성 반응, 천식 또는 호흡 곤란을 일으킬 수 있음



GHS07

H302 삼키면 유해함

H315 피부에 자극을 일으킴

H319 눈에 심한 자극을 일으킴

H335 호흡기계 자극을 일으킬 수 있음

- 라벨표기 요소

- GHS 라벨 요소

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

(2 쪽에 계속)

안전지침서

제31조의 1907/2006/EC에 따라

기압 점: 2013.12.31

개정: 2013.12.31

제품명: Paraformaldehyde, PRILLS

(1 쪽부터 계속)

· 그림문자



GHS02 GHS07 GHS08

· 신호어 위험

· 상표상에 명확히 위험성이 표시된 성분:

Paraformaldehyde

· 유해.위험 문구

- 인화성고체
- 삼키면 유해함
- 피부에 자극을 일으킴
- 눈에 심한 자극을 일으킴
- 흡입시 알레르기성 반응, 천식 또는 호흡 곤란을 일으킬 수 있음
- 호흡기계 자극을 일으킬 수 있음

· 예방조치 문구

- 열·스파크·화염·고열로부터 멀리하시오 - 금연
- 폭발 방지용 전기·환기·조명·장비를 사용하시오.
- 호흡기 보호구를 착용하시오.
- 눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하시오. 계속 씻으시오.
- 잠금장치가 있는 저장장소에 저장하시오.
- 현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

· 기타 유해성

- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

3 구성성분의 명칭 및 함유량

- **화학적 특성:** 혼합물
- **설명:** 무해한 첨가 물 이 함유된 아래에 열 거 된 물 질로 만 들 어 진 혼 합 물.

· 위험 요소:

30525-89-4	Paraformaldehyde	50-100%
	H228; H334; H302; H315; H319; H335	

4 응급조치 요령

· 응급조치요령 내용

· 일반적 정보:

중독 증상은 몇 시간이 지난 뒤에 발생할 수 있다. 따라서 사고가 발생한 후에 적어도 48 시간동안은 의료진의 관찰을 받아야 한다.

· 흡입했을 때:

신선한 공기를 쐬고, 필요할 경우에는 산소 호흡기의 도움을 받는다. 환자를 따뜻하게 하고, 증상이 지속될 경우에는 의료진의 도움을 구한다.
환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.

· 피부에 접촉했을 때: 즉시 물과 비누로 씻고 잘 행군다.

· 눈에 들어갔을 때: 흐르는 물에 눈을 몇분동안 씻어내고나서, 증상이 지속될 경우에는 의사와 상담한다

· 먹었을 때: 증상이 지속될 경우에는 의사와 상담한다.

(3 쪽에 계속)

안전지침서

제31조의 1907/2006/EC에 따라

기압 점: 2013.12.31

개정: 2013.12.31

제품명: Paraformaldehyde, PRILLS

(2 쪽부터 계속)

- 기타 의사의 주의사항:
- 가장 중요한 급·만성 증상 및 영향 추가적인 정보가 존재하지 않습니다.
- 즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후 추가적인 정보가 존재하지 않습니다.

5 폭발·화재시 대처방법

- 소화제
- 적절한 소화제:
이산화탄소, 진화용 석회 가루 또는 물방사를 사용하고, 더 큰 화재는 물을 분사하거나 알코올이 함유된 거품으로 끈다.
- 본 화학물질이나 혼합물에서 발생하는 특별 유해성 추가적인 정보가 존재하지 않습니다.
- 소방관에 대한 권고사항
- 화재 진압 시 착용할 보호구 및 예방조치: 호흡보호장비 설치.

6 누출 사고 시 대처방법

- 개인적 예방조치, 보호장비 및 응급처치 절차 필요없음.
- 환경 관련 예방조치: 하수도망/해수면위의 물/지하수로 도달하지 않게 한다.
- 밀폐 및 정화 방법과 소재:
항목 13에 따라 오염된 물질을 쓰레기로 처분한다.
충분한 환기가 되도록 한다.
- 타 섹션 참조
안전관리에 대한 정보는 제7장을 참고하십시오.
개인보호장비에 대한 정보는 제8장을 참고하십시오.
쓰레기처리에 대한 정보는 제13장을 참고하십시오.

7 취급 및 저장방법

- 취급:
- 안전 취급을 위한 예방조치
철저한 먼지 제거.
작업장에서는 통풍이 잘 되고/습기 제거가 잘 되게 주의한다.
먼지 발생을 피한다.
- 화재 및 폭발 사고 예방대책에 관한 정보: 열로부터 보호한다.
- 혼합위험성 등 안전 저장 조건
- 보관:
- 안전한 저장 방법: 특별한 요구사항이 없음.
- 하나의 공동 보관 시설에 대한 보관 관련 정보: 필요없음
- 보관 조건에 관한 추가적인 정보:
용기를 새지 않게 밀폐한 채 보관한다.
열이나 직사광선으로부터 보호한다.
- 구체적인 최종 사용자 추가적인 정보가 존재하지 않습니다.

8 노출방지 및 개인보호구

- 첨단시설 디자인에 대한 추가정보: 더 이상 의 자료는 없음. 항목 7을 참고하십시오.
- 통제 변수
- 화학물질의 노출기준, 생물학적 노출기준 등:
본 제품에는 작업장에서 감시가 필요한 주요한 가치의 어떤 해당 재료의 양을 함유하고 있지 않다.

(4 쪽에 계속)

안전지침서

제31조의 1907/2006/EC에 따라

기압 점: 2013.12.31

개정: 2013.12.31

제품명: Paraformaldehyde, PRILLS

(3 쪽부터 계속)

· **추가 정보:** 제조할 당시에 유효한 목록을 기초로 사용했다.

· **노출 통제**

· **개인 보호구**

· **일반적 보호 조치 및 위생 조치:**

· 식료품, 음료수와 사료로부터 멀리 떨어져 두어 놓는다.

· 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.

· 휴식 전이나 작업이 끝날 때마다 손을 씻는다.

· 눈과 피부와의 접촉은 피한다.

· **호흡기 보호:**

· 단 시간 또는 경미한 오염의 경우에는 호흡 여과기를 사용한다. 심각한 또는 장기간 노출 시에는 호흡 보호 장비를 사용한다.

· **손 보호:**



보호용 장갑

장갑재질은 제품 / 원료 / 조제를 투과시키지 않아야 하고, 내구성이 있어야 한다.

테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합물에 적합한 장갑재질에 대한 추천이 없다.

투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

· **장갑 의 재료**

· 적합한 장갑의 선정은 재질 차이뿐만 아니라 품질 기준의 차이도 고려하여 이루어져야 하고 제조업종에 따라서도 다르게 선정되어야 한다. 제품은 다양한 재료로부터의 조제로 이루어지는 것이기 때문에, 장갑재질의 안정성은 사전에 예측되어질 수 있는 것이 아니고, 반드시 사용 전에 (그 안전성이) 체크 되어져야 한다.

· **장갑 재료의 투과 시간**

· 정확한 관통 시간은 보호 장갑 제조자에 의하여 인지도고, 준수 되어야 한다.

· **눈 보호:**



확조이는 보안경

9 물리화학적 특성

· **기본 물리 및 화학적 특성에 대한 정보**

· **일반 정보**

· **외형**

· 물리적 상태: 고체

· 색: 색소가 없는

· 냄새: 찌르는 듯한

· 후각역치: 알맞지 않다.

· pH 의 경우 20 °C: 3.5

· **상태 변화**

· 녹는점/어는점: 120 °C

· 초기 끓는점과 끓는점 범위: 맞지 않는다

· 인화점: 70 °C

· 인화성(고체, 기체): 알맞지 않다.

· 점화 온도: 300 °C

(5 쪽에 계속)

안전지침서

제31조의 1907/2006/EC에 따라

기압 점: 2013.12.31

개정: 2013.12.31

제품명: Paraformaldehyde, PRILLS

(4 쪽부터 계속)

· 분해 온도:	알맞지 않다.
· 자기점화:	이제 품은 자연 발화성이 없다.
· 폭발 위험:	이제 품은 폭발 위험성이 없다.
· 인화 또는 폭발 범위의 상한/하한	
아래로:	7 Vol %
위로:	73 Vol %
· 증기압의 경우 20 °C:	X hPa
· 밀도의 경우 20 °C:	1.235 g/cm ³
· 비중:	알맞지 않다.
· 증기밀도:	해당사항 없음.
· 증발 속도:	해당사항 없음.
· 용해도:	
물:	불용해성의
· n 옥탄올/물 분배계수:	알맞지 않다.
· 점도:	
역확성:	해당사항 없음.
등점성:	해당사항 없음.
· 용매 내용물	
유기용매:	0.0 %
물:	3.0 %
VOC (EU)	0.00 %
· 고체의 함량:	86.3 %
· 기타 정보	추가적인 정보가 존재하지 않습니다.

10 안정성 및 반응성

- 반응성
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에 따라 사용할 경우 해체는 없다.
- 유해반응 가능성 위험한 반응으로는 알려지지 않았다.
- 피해야 할 조건: 추가적인 정보가 존재하지 않습니다.
- 혼합 금지 물질: 추가적인 정보가 존재하지 않습니다.
- 유해분해물질: 위험성 있는 분해물들은 알려지지 않았다.

11 독성에 관한 정보

- 독성학적 영향에 대한 정보
- 급성 독성:

· LD/LC50-수치에 따른 분류:		
30525-89-4 Paraformaldehyde		
구강의	LD50	800 mg/kg (Rat)
피부의	LD50	10000 mg/kg (rabbit)
흡입의	LC50/4 h	1070 mg/l (Rat)

(6 쪽에 계속)

안전지침서

제31조의 1907/2006/EC에 따라

기압 점: 2013.12.31

개정: 2013.12.31

제품명: Paraformaldehyde, PRILLS

(5 쪽부터 계속)

- **입차적 자극 효과:**
- **피부 부식성 또는 자극성:** 피부와 접촉을 자극한다.
- **심한 눈 손상 또는 자극성:** 자극
- **감각 화:** 호흡을 통한 감각 화 가능성이 있다.


12 환경에 미치는 영향

- **독성**
- **수생독성:** 추가적인 정보가 존재하지 않습니다.
- **지속성 및 분해성** 추가적인 정보가 존재하지 않습니다.
- **환경 시스템에서의 행동:**
- **생물농축 잠재성** 추가적인 정보가 존재하지 않습니다.
- **토양내 이동성** 추가적인 정보가 존재하지 않습니다.
- **추가적인 생태학 정보:**
- **일반 특징:**
수질오염등급 1 (자체등급분류): 약하게 수질오염이 된
희석시키지 않은 채 대량으로 지하수나, 하천으로 그리고 하수도망에도 도달하지 않게 한다.
- **PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과**
- **PBT(잔류성, 생물농축성, 독성 물질):** 해당사항 없음.
- **vPvB(고 잔류성, 고 생물농축성 물질):** 해당사항 없음.
- **기타 부작용** 추가적인 정보가 존재하지 않습니다.

13 폐기시 주의사항

- **폐기물 처리 방법**
- **권고:** 생활쓰레기와 함께 처리되어서는 안 된다. 하수도망으로 유입되어서는 안 된다.
- **비위생적 포장:**
- **권고:** 당국의 지침에 입각한 쓰레기 처리.

14 운송에 필요한 정보

<ul style="list-style-type: none"> · 유엔 번호 · ADR, IMDG, IATA 	UN2213
<ul style="list-style-type: none"> · UN 적정 선적명 · ADR · IMDG, IATA 	2213 PARAFORMALDEHYDE PARAFORMALDEHYDE
<ul style="list-style-type: none"> · 교통 위험 클래스 · ADR 	
	
<ul style="list-style-type: none"> · 등급 · 위험물 라벨 	4.1 발화성고체 4.1
<ul style="list-style-type: none"> · IMDG, IATA · Class 	4.1 Flammable solids, self-reactive substances and solid desensitized explosives.

(7 쪽에 계속)

안전지침서

제31조의 1907/2006/EC에 따라

기압 점: 2013.12.31

개정: 2013.12.31

제품명: Paraformaldehyde, PRILLS

(6 쪽부터 계속)

· Label	-
· 용기등급	
· ADR	III
· IMDG, IATA	누락되다
· 환경적 유해물질:	
· 해양오염물질:	아니오
· 이용자 특별 예방조치	경고: 발화성고체
· 위험 코드:	40
· EMS-번호:	F-A,S-G
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송	해당사항 없음.
· 운송/추가 정보:	
· ADR	
· 한정수량 (LQ)	LQ9
· 운송구분	3
· 터널제한코드	E
· UN "모범규제":	UN2213, PARAFORMALDEHYDE, 4.1, III

15 법적 규제현황

· 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률

· Korean Existing Chemical Inventory		
30525-89-4	Paraformaldehyde	KE-27818
7732-18-5	water, distilled, conductivity or of similar purity	KE-35400

· GHS 라벨 요소

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

· 위험도표



GHS02 GHS07 GHS08

· 표지어 위험

· 상 표 상 에 명 확 히 위 험 성 이 표 시 된 성 분:

Paraformaldehyde

· 위험 문구

- 인화성고체
- 삼키면 유해함
- 피부에 자극을 일으킴
- 눈에 심한 자극을 일으킴
- 흡입시 알레르기성 반응, 천식 또는 호흡 곤란을 일으킬 수 있음
- 호흡기계 자극을 일으킬 수 있음

· 주의 문구

- 열·스파크·화염·고열로부터 멀리하시오 - 금연
- 폭발 방지용 전기·환기·조명·장비를 사용하시오.

(8 쪽 에 계 속)

안전지침서

제31조의 1907/2006/EC에 따라

기압 점: 2013.12.31

개정: 2013.12.31

제품명: Paraformaldehyde, PRILLS

(7 쪽부터 계속)

호흡기 보호구를 착용하십시오.

눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면콘택트렌즈를 제거하십시오. 계속 씻으시오.

잠금장치가 있는 저장장소에 저장하십시오.

현지/지역/국가/국제 규정에 따라서 내용물/용기 노출

· **화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

16 그 밖의 참고사항

이 보고는 우리 지식에 대한 오늘날의 의상 태에 대하여 평가하고 있다, 하지만 이 보고서는 생산 특성에 관한 보증은 기술하지 않았으며 계약적인 법률 관계에 기반을 두고 있지 않다

· **최초 작성일자:** 2013.12.31· **개정 횟수 및 최종 개정일자:** 1 / 2013.12.31· **약어와 두문자어:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Ficha de dados de segurança

Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 31.12.2013

Revisão: 31.12.2013

1 Identificação da substância/mistura e da sociedade/empresa

- **Identificador do produto**
- **Nome comercial:** Paraformaldehyde, PRILLS
- **Código do produto:** 19200, 19202
- **Utilizações identificadas relevantes da substância ou mistura e utilizações desaconselhadas**
Não existe mais nenhuma informação relevante disponível.
- **Utilização da substância / da preparação** Químicos de laboratório
- **Identificação do fornecedor da ficha de dados de segurança**
- **Fabricante/fornecedor:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Entidade para obtenção de informações adicionais:** Product safety department
- **Número de telefone de emergência:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Identificação dos perigos

- **Classificação da substância ou mistura**
- **Classificação em conformidade com o Regulamento (CE) n.º 1272/2008**



GHS02 chama

Flam. Sol. 2 H228 Sólido inflamável.



GHS08 perigo para a saúde

Resp. Sens. 1 H334 Quando inalado, pode provocar sintomas de alergia ou de asma ou dificuldades respiratórias.



GHS07

Acute Tox. 4 H302 Nocivo por ingestão.

Skin Irrit. 2 H315 Provoca irritação cutânea.

Eye Irrit. 2 H319 Provoca irritação ocular grave.

STOT SE 3 H335 Pode provocar irritação das vias respiratórias.

- **Classificação em conformidade com a Directiva 67/548/CEE ou Directiva 1999/45/CE**



Xn; Nocivo

R20: Nocivo por inalação.



Xi; Irritante

R36/37/38: Irritante para os olhos, vias respiratórias e pele.

(continuação na página 2)

Ficha de dados de segurança

Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 31.12.2013

Revisão: 31.12.2013

Nome comercial: Paraformaldehyde, PRILLS

(continuação da página 1)



Xn; Sensibilizante

R42: Pode causar sensibilização por inalação.

· **Avisos especiais sobre os riscos para o homem e o ambiente:**

O produto deve estar obrigatoriamente identificado com base no método de avaliação da "Directiva geral de classificação para preparações da CE" na última versão em vigor.

· **Método de classificação:**

A classificação está de acordo com as listas publicadas pela União Europeia mas foi completada com dados da literatura especializada bem como com informações dos fornecedores das matérias-primas.

· **Elementos do rótulo**· **Rótulo de acordo com as disposições comunitárias:**

O produto está identificado e classificado de acordo com as directivas comunitárias e com a lei sobre substância perigosas.

· **Símbolo de perigo e designação de perigo do produto:**

Xn Nocivo

· **Componentes determinantes para os perigos constantes do rótulo:**

Paraformaldeído

· **frases R:**

- 20 Nocivo por inalação.
 36/37/38 Irritante para os olhos, vias respiratórias e pele.
 42 Pode causar sensibilização por inalação.

· **frases S:**

- 9 Manter o recipiente num local bem ventilado.
 22 Não respirar as poeiras.
 45 Em caso de acidente ou de indisposição, consultar imediatamente o médico (se possível mostrar-lhe o rótulo).
 60 Este produto e o seu recipiente devem ser eliminados como resíduos perigosos.

· **Outros perigos**· **Resultados da avaliação PBT e mPmB**

- **PBT:** Não aplicável.
 · **mPmB:** Não aplicável.

3 Composição/informação sobre os componentes

· **Caracterização química:** Misturas· **Descrição:** Mistura das seguintes substâncias com aditivos não perigosos.· **Substâncias perigosas:**

30525-89-4	Paraformaldeído	50-100%
	Xn R20; Xi R36/37/38; Xn R42 Flam. Sol. 2, H228; Resp. Sens. 1, H334; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	

· **Avisos adicionais:** O texto das indicações de perigo aqui incluído poderá ser consultado no capítulo 16.

PT

(continuação na página 3)

Ficha de dados de segurança

Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 31.12.2013

Revisão: 31.12.2013

Nome comercial: **Paraformaldehyde, PRILLS**

(continuação da página 2)

4 Primeiros socorros

- **Descrição das medidas de primeiros socorros**
- **Indicações gerais:**
Os sintomas de envenenamento podem surgir apenas após várias horas, por isso é necessária vigilância médica pelo menos 48 horas após o acidente.
- **Em caso de inalação:**
Remover a vítima para um local arejado. Se necessário administrar respiração artificial. Manter a vítima aquecida. Se os sintomas persistirem, consultar o médico.
Se a vítima estiver inconsciente, posicioná-la e transportá-la com estabilidade, deitada lateralmente.
- **Em caso de contacto com a pele:** *Lavar imediatamente com água e sabão e enxaguar abundantemente.*
- **Em caso de contacto com os olhos:**
Enxaguar os olhos durante alguns minutos sob água corrente, mantendo as pálpebras abertas. Em caso de persistência dos sintomas, consultar o médico.
- **Em caso de ingestão:** *Se os sintomas persistirem, consultar o médico.*
- **Indicações para o médico:**
- **Sintomas e efeitos mais importantes, tanto agudos como retardados**
Não existe mais nenhuma informação relevante disponível.
- **Indicações sobre cuidados médicos urgentes e tratamentos especiais necessários**
Não existe mais nenhuma informação relevante disponível.

5 Medidas de combate a incêndios

- **Meios de extinção**
- **Meios adequados de extinção:**
CO2, pó extintor ou jacto de água. Um incêndio de grandes dimensões deve ser combatido com jacto de água ou espuma resistente ao álcool.
- **Perigos especiais decorrentes da substância ou mistura**
Não existe mais nenhuma informação relevante disponível.
- **Recomendações para o pessoal de combate a incêndios**
- **Equipamento especial de protecção:** *Colocar máscara de respiração.*

6 Medidas a tomar em caso de fugas acidentais

- **Precauções individuais, equipamento de protecção e procedimentos de emergência** *Não necessário.*
- **Precauções a nível ambiental:** *Evitar que penetre na canalização / águas superficiais / águas subterrâneas.*
- **Métodos e materiais de confinamento e limpeza:**
Eliminar residualmente as substâncias contaminadas como um resíduo segundo o Ponto 13.
Assegurar uma ventilação adequada.
- **Remissão para outras secções**
Para informações sobre uma manipulação segura, ver o capítulo 7.
Para informações referentes ao equipamento de protecção individual, ver o capítulo 8.
Para informações referentes à eliminação residual, ver o capítulo 13.

7 Manuseamento e armazenagem

- **Manuseamento:**
- **Precauções para um manuseamento seguro**
Remover completamente o pó.
Assegurar uma boa ventilação / exaustão no local de trabalho.
Evitar a formação de pó.

(continuação na página 4)

Ficha de dados de segurança

Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 31.12.2013

Revisão: 31.12.2013

Nome comercial: Paraformaldehyde, **PRILLS**

(continuação da página 3)

- **Precauções para prevenir incêndios e explosões:** Proteger do calor.
- **Condições de armazenagem segura, incluindo eventuais incompatibilidades**
- **Armazenagem:**
- **Requisitos para espaços ou contentores para armazenagem:** Sem requisitos especiais.
- **Avisos para armazenagem conjunta:** Não necessário.
- **Outros avisos sobre as condições de armazenagem:**
Manter o recipiente hermeticamente fechado.
Proteger do calor e da radiação directa do sol.
- **Utilizações finais específicas** Não existe mais nenhuma informação relevante disponível.

8 Controlo da exposição/protecção individual

- **Indicações adicionais para concepção de instalações técnicas:** Não existem outras informações, ver ponto 7.
- **Parâmetros de controlo**
- **Componentes cujo valor do limite de exposição no local de trabalho deve ser monitorizado:**
O produto não contém quantidades relevantes de substâncias cujo valor limite relacionado no local de trabalho tenha que ser monitorizado.
- **Indicações adicionais:** Foram utilizadas como base as listas válidas à data da elaboração.
- **Controlo da exposição**
- **Equipamento de protecção individual:**
- **Medidas gerais de protecção e higiene:**
Manter afastado de alimentos, bebidas e forragens.
Despir imediatamente a roupa contaminada e embebida.
Lavar as mãos antes das pausas e no fim do trabalho.
Evitar o contacto com os olhos e com a pele.
- **Protecção respiratória:**
Utilizar uma máscara respiratória se a exposição for reduzida ou durante um curto espaço de tempo; se esta for mais prolongada ou mais intensa, utilizar uma máscara respiratória independente do ar ambiente.
- **Protecção das mãos:**



Luvas de protecção

O material das luvas tem de ser impermeável e resistente ao produto / à substância / preparação.
Uma vez que não foram realizados testes nesta área, não podemos recomendar um determinado tipo de material para as luvas que seja adequado para o produto / a preparação / a mistura de químicos.
Escolher o material das luvas tendo em consideração a durabilidade, a permeabilidade e a degradação.

- **Material das luvas**

A escolha das luvas mais adequadas não depende apenas do material, mas também de outras características qualitativas e varia de fabricante para fabricante. O facto de o produto ser composto por uma variedade de materiais leva a que não seja possível prever a duração dos mesmos e, conseqüentemente, das luvas, sendo assim necessário proceder a uma verificação antes da sua utilização.

- **Tempo de penetração no material das luvas**

Deve informar-se sobre a validade exacta das suas luvas junto do fabricante e respeitá-la.

(continuação na página 5)

Ficha de dados de segurança
Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 31.12.2013

Revisão: 31.12.2013

Nome comercial: Paraformaldehyde, PRILLS

(continuação da página 4)

· **Protecção dos olhos:**

Óculos de protecção totalmente fechados

9 Propriedades físicas e químicas

· **Informações sobre propriedades físicas e químicas de base**· **Informações gerais**· **Aspecto:**

Forma:

Sólido

Cor:

Incolor

· **Odor:**

Agudo

· **Limiar olfactivo:**

Não classificado.

· **valor pH em 20 °C:**

3,5

· **Mudança do estado:**

Ponto / intervalo de fusão:

120 °C

Ponto / intervalo de ebulição:

Não classificado.

· **Ponto de inflamação:**

70 °C

· **Inflamabilidade (sólido, gás):**

Não classificado.

· **Temperatura de ignição:**

300 °C

· **Temperatura de decomposição:**

Não classificado.

· **Auto-inflamabilidade:**

O produto não é auto-inflamável.

· **Perigos de explosão:**

O produto não corre o risco de explosão.

· **Limites de explosão:**

Inferior:

7 Vol %

Superior:

73 Vol %

· **Pressão de vapor em 20 °C:**

X hPa

· **Densidade em 20 °C:**1,235 g/cm³· **Densidade relativa**

Não classificado.

· **Densidade de vapor**

Não aplicável.

· **Velocidade de evaporação**

Não aplicável.

· **Solubilidade em / miscibilidade com água:**

Insolúvel.

· **Coefficiente de distribuição (n-octanol/água):** Não classificado.· **Viscosidade:**

Dinâmico:

Não aplicável.

Cinemático:

Não aplicável.

· **Percentagem de solvente:**

Solventes orgânicos:

0,0 %

Água:

3,0 %

VOC (UE)

0,00 %

· **Percentagem de substâncias sólidas:**

86,3 %

(continuação na página 6)

Ficha de dados de segurança

Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 31.12.2013

Revisão: 31.12.2013

Nome comercial: Paraformaldehyde, PRILLS

(continuação da página 5)

· **Outras informações**

Não existe mais nenhuma informação relevante disponível.

10 Estabilidade e reactividade

- **Reactividade**
- **Estabilidade química**
- **Decomposição térmica / condições a evitar:** Não existe decomposição se usado de acordo com as especificações.
- **Possibilidade de reacções perigosas** Não se conhecem reacções perigosas.
- **Condições a evitar** Não existe mais nenhuma informação relevante disponível.
- **Materiais incompatíveis:** Não existe mais nenhuma informação relevante disponível.
- **Produtos de decomposição perigosos:** Não se conhecem produtos de decomposição perigosos.

11 Informação toxicológica

- **Informações sobre os efeitos toxicológicos**
- **Toxicidade aguda:**

· **Valores LD/LC50 relevantes para a classificação:**

30525-89-4 Paraformaldeído

por via oral	LD50	800 mg/kg (Rat)
por via dérmica	LD50	10000 mg/kg (rabbit)
por inalação	LC50/4 h	1070 mg/l (Rat)

- **Efeito de irritabilidade primário:**
- **sobre a pele:** Irritante para a pele e as mucosas.
- **sobre os olhos:** Efeito irritante.
- **sensibilização:** É possível sensibilização através da inalação.
- **Avisos adicionais de toxicologia:**
O produto apresenta os seguintes perigos com base no método de cálculo utilizado na Directiva comunitária de classificação de preparações, nos termos da última versão em vigor.
Nocivo
Irritante

12 Informação ecológica

- **Toxicidade**
- **Toxicidade aquática:** Não existe mais nenhuma informação relevante disponível.
- **Persistência e degradabilidade** Não existe mais nenhuma informação relevante disponível.
- **Comportamento em sistemas ambientais:**
- **Potencial de bioacumulação** Não existe mais nenhuma informação relevante disponível.
- **Mobilidade no solo** Não existe mais nenhuma informação relevante disponível.
- **Outras indicações ecológicas:**
- **Indicações gerais:**
Classe de perigo para a água 1 (D) (auto-classificação): pouco perigoso para a água
Não deixar chegar substâncias concentradas, ou seja quantidades grandes, às águas subterrâneas, aos cursos de água ou à canalização.
- **Resultados da avaliação PBT e mPmB**
- **PBT:** Não aplicável.
- **mPmB:** Não aplicável.

(continuação na página 7)

Ficha de dados de segurança
Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 31.12.2013

Revisão: 31.12.2013

Nome comercial: Paraformaldehyde, PRILLS


(continuação da página 6)

· **Outros efeitos adversos** Não existe mais nenhuma informação relevante disponível.

13 Considerações relativas à eliminação

- **Métodos de tratamento de resíduos**
- **Recomendação:** Não se pode eliminar juntamente com o lixo doméstico. Não permita que chegue à canalização.
- **Embalagens contaminadas:**
- **Recomendação:** Eliminação residual conforme o regulamento dos serviços públicos.

14 Informações relativas ao transporte

· Nº UN · ADR, IMDG, IATA	UN2213
· Designação oficial de transporte da ONU · ADR · IMDG, IATA	2213 PARAFORMALDEÍDO PARAFORMALDEHYDE
· Classes de perigo para efeitos de transporte · ADR	
	
· Classe · Rótulo	4.1 <i>Matérias sólidas inflamáveis, matérias auto-reactivas e matérias explosivas dessensibilizadas sólidas</i> 4.1
· IMDG, IATA · Class · Label	4.1 <i>Flammable solids, self-reactive substances and solid desensitised explosives.</i> -
· Tipo de embalagem · ADR · IMDG, IATA	III não aplicável
· Perigos para o ambiente: · Poluente das águas:	Não
· Precauções especiais para o utilizador · Nº Kemler: · Nº EMS:	<i>Atenção: Matérias sólidas inflamáveis, matérias auto-reactivas e matérias explosivas dessensibilizadas sólidas</i> 40 F-A,S-G
· Transporte a granel em conformidade com o anexo II da Convenção Marpol 73/78 e o Código IBC	Não aplicável.
· Transporte/outras informações:	
· ADR · Quantidades Limitadas (LQ) · Categoria de transporte · Código de restrição em túneis	LQ9 3 E

(continuação na página 8)

Ficha de dados de segurança
Em conformidade com 1907/2006/CE, Artigo 31.º

data da impressão 31.12.2013

Revisão: 31.12.2013

Nome comercial: Paraformaldehyde, PRILLS

(continuação da página 7)

· UN "Model Regulation":

UN2213, PARAFORMALDEÍDO, 4.1, III

15 Informação sobre regulamentação

· **Avaliação da segurança química:** Não foi realizada nenhuma Avaliação de Segurança Química.

16 Outras informações

As informações fornecidas baseiam-se no estado actual dos nossos conhecimentos, embora não representem uma garantia das propriedades do produto e não fundamentam uma relação contratual.

· **Frases relevantes**

H228 Sólido inflamável.
 H302 Nocivo por ingestão.
 H315 Provoca irritação cutânea.
 H319 Provoca irritação ocular grave.
 H334 Quando inalado, pode provocar sintomas de alergia ou de asma ou dificuldades respiratórias.
 H335 Pode provocar irritação das vias respiratórias.

R20 Nocivo por inalação.
 R36/37/38 Irritante para os olhos, vias respiratórias e pele.
 R42 Pode causar sensibilização por inalação.

· **Abreviaturas e acrónimos:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 31.12.2013

Revisión: 31.12.2013

1 Identificación de la sustancia o la mezcla y de la sociedad o la empresa

- **Identificador del producto**
- **Nombre comercial:** Paraformaldehyde, PRILLS
- **Número del artículo:** 19200, 19202
- **Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados**
No existen más datos relevantes disponibles.
- **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio
- **Datos del proveedor de la ficha de datos de seguridad**
- **Fabricante/distribuidor:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: sgkcck@aol.com
www.emsdiasum.com
- **Aname**
C/ Perez Galdos no. 2
28693 Quijorna
Madrid, Spain
Tel: +34.91.816.89.50
Fax: +34.91.816.85.94
email: ventas@aname.es
- **Área de información:** Product safety department
- **Teléfono de emergencia:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Identificación de los peligros

- **Clasificación de la sustancia o de la mezcla**
- **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS02 llama

Flam. Sol. 2 H228 Sólido inflamable.



GHS08 peligro para la salud

Resp. Sens. 1 H334 Puede provocar síntomas de alergia o asma o dificultades respiratorias en caso de inhalación.



GHS07

Acute Tox. 4 H302 Nocivo en caso de ingestión.

Skin Irrit. 2 H315 Provoca irritación cutánea.

Eye Irrit. 2 H319 Provoca irritación ocular grave.

STOT SE 3 H335 Puede irritar las vías respiratorias.

(se continua en página 2)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31


fecha de impresión 31.12.2013

Revisión: 31.12.2013


Nombre comercial: Paraformaldehyde, PRILLS

(se continua en página 1)


· **Clasificación con arreglo a la Directiva 67/548/CEE o Directiva 1999/45/CE**

 Xn; Nocivo

R20: Nocivo por inhalación.

 Xi; Irritante

R36/37/38: Irrita los ojos, la piel y las vías respiratorias.

 Xn; Sensibilizante

R42: Posibilidad de sensibilización por inhalación.

· **Indicaciones adicionales sobre los riesgos para personas y el medio ambiente:**

Es obligatorio identificar el producto según el procedimiento de cálculo de la última versión válida de la "Directiva general de clasificación de preparaciones de la UE".

· **Sistema de clasificación:**

La clasificación corresponde a las listas actuales de la CE, pero siempre completada por la literatura especializada y los informes de las empresas.

· **Elementos de la etiqueta**

· **Distintivo según las directrices de la CEE:**

El producto está catalogado y etiquetado según las directrices de la CEE/Reglamento sobre sustancias peligrosas.

· **Letra indicadora y denominación de la peligrosidad del producto:**

 Xn Nocivo

· **Componentes peligrosos a indicar en el etiquetaje:**

Paraformaldehído

· **Frases-R:**

20 Nocivo por inhalación.

36/37/38 Irrita los ojos, la piel y las vías respiratorias.

42 Posibilidad de sensibilización por inhalación.

· **Frases-S:**

9 Consérvese el recipiente en lugar bien ventilado.

22 No respirar el polvo.

45 En caso de accidente o malestar, acúdase inmediatamente al médico (si es posible, muéstresele la etiqueta).

60 Elimínense el producto y su recipiente como residuos peligrosos.

· **Otros peligros**

· **Resultados de la valoración PBT y mPmB**

· **PBT:** No aplicable.

· **mPmB:** No aplicable.

3 Composición/información sobre los componentes

· **Caracterización química: Mezclas**

· **Descripción:** Mezcla formada por las sustancias especificadas a continuación con adiciones no peligrosas.

(se continua en página 3)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 31.12.2013

Revisión: 31.12.2013

Nombre comercial: Paraformaldehyde, PRILLS

(se continua en página 2)

· **Componentes peligrosos:**

30525-89-4	Paraformaldehído	50-100%
	<ul style="list-style-type: none"> ☒ Xn R20; ☒ Xi R36/37/38; ☒ Xn R42 ☒ Flam. Sol. 2, H228; ☒ Resp. Sens. 1, H334; ☒ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 	

· **Indicaciones adicionales:** El texto de los posibles riesgos aquí indicados se puede consultar en el capítulo 16.

4 Primeros auxilios

· **Descripción de los primeros auxilios**· **Instrucciones generales:**

Los síntomas de intoxicación pueden presentarse después de muchas horas, por lo que se requiere una supervisión médica durante un mínimo de 48 horas después del accidente.

· **En caso de inhalación del producto:**

Suministrar aire fresco; eventualmente hacer respiración artificial, calor. Si los trastornos persisten, consultar al médico.

Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.

· **En caso de contacto con la piel:** Lavar inmediatamente con agua y jabón y enjuagar bien.· **En caso de con los ojos:**

Limpia los ojos abiertos durante varios minutos con agua corriente. En caso de trastornos persistentes consultar un médico.

· **En caso de ingestión:** Consultar un médico si los trastornos persisten.· **Indicaciones para el médico:**· **Principales síntomas y efectos, agudos y retardados** No existen más datos relevantes disponibles.· **Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente** No existen más datos relevantes disponibles.

5 Medidas de lucha contra incendios

· **Medios de extinción**· **Sustancias extintoras apropiadas:**

CO₂, polvo extintor o chorro de agua rociada. Combatir incendios mayores con chorro de agua rociada o espuma resistente al alcohol.

· **Peligros específicos derivados de la sustancia o la mezcla** No existen más datos relevantes disponibles.· **Recomendaciones para el personal de lucha contra incendios**· **Equipo especial de protección:** Colocarse la protección respiratoria.

6 Medidas en caso de vertido accidental

· **Precauciones personales, equipo de protección y procedimientos de emergencia** No es necesario.· **Precauciones relativas al medio ambiente:**

Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.

· **Métodos y material de contención y de limpieza:**

Desechar el material contaminado como vertido según ítem 13.

Asegurar suficiente ventilación.

· **Referencia a otras secciones**

Ver capítulo 7 para mayor información sobre una manipulación segura.

Ver capítulo 8 para mayor información sobre el equipo personal de protección.

(se continua en página 4)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 31.12.2013

Revisión: 31.12.2013

Nombre comercial: Paraformaldehyde, PRILLS

(se continua en página 3)

Para mayor información sobre cómo desechar el producto, ver capítulo 13.

7 Manipulación y almacenamiento

- **Manipulación:**
- **Precauciones para una manipulación segura**
Desempolvar cuidadosamente.
Asegurar suficiente ventilación /aspiración en el puesto de trabajo.
Evitar la formación de polvo.
- **Prevención de incendios y explosiones:** Proteger del calor.
- **Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** No se requieren medidas especiales.
- **Normas en caso de un almacenamiento conjunto:** No es necesario.
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**
Mantener el recipiente cerrado herméticamente.
Proteger del calor y de la luz directa del sol.
- **Usos específicos finales** No existen más datos relevantes disponibles.

8 Controles de exposición/protección individual

- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**
Sin datos adicionales, ver punto 7.
- **Parámetros de control**
- **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**
El producto no contiene cantidades relevantes de sustancias con valores límite que exijan un control en el puesto de trabajo.
- **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.
- **Controles de la exposición**
- **Equipo de protección individual:**
- **Medidas generales de protección e higiene:**
Mantener alejado de alimentos, bebidas y alimentos para animales.
Quitarse de inmediato la ropa ensuciada o impregnada.
Lavarse las manos antes de las pausas y al final del trabajo.
Evitar el contacto con los ojos y la piel.
- **Protección respiratoria:**
Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.
- **Protección de manos:**



Guantes de protección

El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.
Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.
Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.

- **Material de los guantes**

La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro. Teniendo en cuenta que el producto está fabricado a partir de diferentes materiales, su calidad no puede ser evaluada de antemano, de modo que los guantes deberán ser

(se continua en página 5)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 31.12.2013

Revisión: 31.12.2013

Nombre comercial: Paraformaldehyde, PRILLS

(se continua en página 4)

controlados antes de su utilización.

- **Tiempo de penetración del material de los guantes**

El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.

- **Protección de ojos:**



Gafas de protección herméticas

9 Propiedades físicas y químicas

- **Información sobre propiedades físicas y químicas básicas**

- **Datos generales**

- **Aspecto:**

· Forma:	Sólido
· Color:	Incoloro
· Olor:	Penetrante
· Umbral olfativo:	No determinado.

- **valor pH a 20 °C:** 3,5

- **Cambio de estado**

· Punto de fusión /campo de fusión:	120 °C
· Punto de ebullición /campo de ebullición:	Indeterminado.

- **Punto de inflamación:** 70 °C

- **Inflamabilidad (sólido, gaseiforme):** No determinado.

- **Temperatura de ignición:** 300 °C

- **Temperatura de descomposición:** No determinado.

- **Autoinflamabilidad:** El producto no es autoinflamable.

- **Peligro de explosión:** El producto no es explosivo.

- **Límites de explosión:**

· Inferior:	7 Vol %
· Superior:	73 Vol %

- **Presión de vapor a 20 °C:** X hPa

· Densidad a 20 °C:	1,235 g/cm ³
· Densidad relativa	No determinado.
· Densidad de vapor	No aplicable.
· Velocidad de evaporación	No aplicable.

- **Solubilidad en / miscibilidad con agua:** Insoluble.

- **Coefficiente de reparto (n-octanol/agua):** No determinado.

- **Viscosidad:**

· Dinámica:	No aplicable.
· Cinemática:	No aplicable.

(se continua en página 6)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 31.12.2013

Revisión: 31.12.2013

Nombre comercial: Paraformaldehyde, PRILLS

(se continua en página 5)

· Concentración del disolvente:	
Disolventes orgánicos:	0,0 %
Agua:	3,0 %
VOC (CE)	0,00 %
Contenido de cuerpos sólidos:	86,3 %
· Información adicional	No existen más datos relevantes disponibles.

10 Estabilidad y reactividad

- **Reactividad**
- **Estabilidad química**
- **Descomposición térmica / condiciones que deben evitarse:** No se descompone al emplearse adecuadamente.
- **Posibilidad de reacciones peligrosas:** No se conocen reacciones peligrosas.
- **Condiciones que deben evitarse:** No existen más datos relevantes disponibles.
- **Materiales incompatibles:** No existen más datos relevantes disponibles.
- **Productos de descomposición peligrosos:** No se conocen productos de descomposición peligrosos.

11 Información toxicológica

- **Información sobre los efectos toxicológicos**
- **Toxicidad aguda:**

· **Valores LD/LC50 (dosis letal /dosis letal = 50%) relevantes para la clasificación:**

30525-89-4 Paraformaldehído

Oral	LD50	800 mg/kg (Rat)
Dermal	LD50	10000 mg/kg (rabbit)
Inhalatorio	LC50/4 h	1070 mg/l (Rat)

- **Efecto estimulante primario:**
- **en la piel:** Irrita la piel y las mucosas.
- **en el ojo:** Produce irritaciones.
- **Sensibilización:** Posible sensibilización al aspirarse.
- **Indicaciones toxicológicas adicionales:**
En conformidad con el procedimiento de cálculo contenido en la última versión de la Normativa General de Clasificación de la CE para Preparados, el producto tiene los siguientes riesgos:
Nocivo
Irritante

12 Información ecológica

- **Toxicidad**
- **Toxicidad acuática:** No existen más datos relevantes disponibles.
- **Persistencia y degradabilidad:** No existen más datos relevantes disponibles.
- **Comportamiento en sistemas ecológicos:**
- **Potencial de bioacumulación:** No existen más datos relevantes disponibles.
- **Movilidad en el suelo:** No existen más datos relevantes disponibles.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**
Nivel de riesgo para el agua 1 (autoclasificación): escasamente peligroso para el agua

(se continua en página 7)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 31.12.2013

Revisión: 31.12.2013

Nombre comercial: Paraformaldehyde, PRILLS

(se continua en página 6)


En estado no diluido o no neutralizado, no dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.

- **Resultados de la valoración PBT y mPmB**
- **PBT:** No aplicable.
- **mPmB:** No aplicable.
- **Otros efectos adversos** No existen más datos relevantes disponibles.

13 Consideraciones relativas a la eliminación

- **Métodos para el tratamiento de residuos**
- **Recomendación:** No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.
- **Embalajes sin limpiar:**
- **Recomendación:** Eliminar conforme a las disposiciones oficiales.

14 Información relativa al transporte

· Número UN	
· ADR, IMDG, IATA	UN2213
· Designación oficial de transporte de las Naciones Unidas	
· ADR	2213 PARAFORMALDEHÍDO
· IMDG, IATA	PARAFORMALDEHYDE
· Clase(s) de peligro para el transporte	
· ADR	
	
· Clase	4.1 Materias sólidas inflamables, Materias autorreactivas y Materias explosivas desensibilizadas sólidas
· Etiqueta	4.1
· IMDG, IATA	
· Class	4.1 Flammable solids, self-reactive substances and solid desensitised explosives.
· Label	-
· Grupo de embalaje	
· ADR	III
· IMDG, IATA	suprimido
· Peligros para el medio ambiente:	
· Contaminante marino:	No
· Precauciones particulares para los usuarios	Atención: Materias sólidas inflamables, Materias autorreactivas y Materias explosivas desensibilizadas sólidas
· Número Kemler:	40
· Número EMS:	F-A,S-G
· Transporte a granel con arreglo al anexo II del Convenio Marpol 73/78 y del Código IBC	No aplicable.

(se continua en página 8)

Ficha de datos de seguridad

según 1907/2006/CE, Artículo 31

fecha de impresión 31.12.2013

Revisión: 31.12.2013

Nombre comercial: Paraformaldehyde, PRILLS

(se continua en página 7)

· **Transporte/datos adicionales:**

· **ADR**

- | | |
|--|-----|
| · Cantidades limitadas (LQ) | LQ9 |
| · Categoría de transporte | 3 |
| · Código de restricción del túnel | E |

· **"Reglamentación Modelo" de la UNECE:** UN2213, PARAFORMALDEHÍDO, 4.1, III

15 Información reglamentaria

· **Evaluación de la seguridad química:** Una evaluación de la seguridad química no se ha llevado a cabo.

16 Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

· **Frases relevantes**

- H228 Sólido inflamable.
 H302 Nocivo en caso de ingestión.
 H315 Provoca irritación cutánea.
 H319 Provoca irritación ocular grave.
 H334 Puede provocar síntomas de alergia o asma o dificultades respiratorias en caso de inhalación.
 H335 Puede irritar las vías respiratorias.
- R20 Nocivo por inhalación.
 R36/37/38 Irrita los ojos, la piel y las vías respiratorias.
 R42 Posibilidad de sensibilización por inhalación.

· **Abreviaturas y acrónimos:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent