

Valid from: 20.04.2006


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

- Product name: **FORMALDEHYDE CATALYST**
- Application of the substance / the preparation Catalysts
- Manufacturer/Supplier:
Perstorp Specialty Chemicals AB
SE-284 80 Perstorp, Sweden
Tel. +46 435 38000
Fax +46 435 37067

polyolinfo@perstorp.com
www.perstorp.com
- Further information obtainable from: EHS-department Perstorp Specialty Chemicals AB
- Information in case of emergency: (Int.) +46 8 337043 (Emergency Response Center, Sweden)

2 Composition/information on ingredients

Chemical components:

CAS: 13769-81-8 EINECS: 237-389-3	Ferric molybdate		65-80%
CAS: 1313-27-5 EINECS: 215-204-7	molybdenum trioxide	 Xn; R 36/37-48/20/22	20-35%

3 Hazards identification

Hazard description:



Xn Harmful

- Information concerning particular hazards for human and environment:
R 36/37 Irritating to eyes and respiratory system.
R 48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
- Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First-aid measures

- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye under running water.
- After swallowing:
Rinse out mouth and then drink plenty of water or milk.
If you feel unwell consult doctor.

5 Fire-fighting measures

- Suitable extinguishing agents:
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Protective equipment: Respiratory protective device.

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6 Accidental release measures

- **Person-related safety precautions:**
Ensure adequate ventilation
Avoid formation of dust.
- **Measures for cleaning/collecting:** Pick up mechanically.

7 Handling and storage

- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**

1313-27-5 molybdenum trioxide

WEL	Short-term value: 20 mg/m ³ Long-term value: 10 mg/m ³
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- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:**
Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

- **Material of gloves**
Plastic gloves
Strong material gloves
- **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:**



Safety glasses

9 Physical and chemical properties

General Information

Form:	Pellets
Colour:	Light green
Odour:	Odourless

Change in condition

Melting point/Melting range:	> 600°C
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Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Product is not flammable.
Danger of explosion:	Product does not present an explosion hazard.
Density at 20°C:	650-900 kg/m ³
Solubility in / Miscibility with water at 20°C:	0.2 % w/w
alcohols:	0.33 % w/w ethanol (25 °C) 0.08 % w/w n-butanol (25 °C)
pH-value (60 g/l) at 20°C:	4-7
Partition coefficient (n-octanol/water):	-1.7 log POW (calc. dap)

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.

11 Toxicological information

- Acute toxicity:**

- LD/LC50 values relevant for classification:**

13769-81-8 Ferric molybdate

Oral	LD50	> 2000 mg/kg (mouse)
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1313-27-5 molybdenum trioxide

Oral	LD50	3260 mg/kg (rat)
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Dermal	LD50	> 2000 mg/kg (rat)
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Inhalative	LC50	> 5.84 mg/l (rat)
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- Primary irritant effect:**

- on the skin:** No irritating effect.

- on the eye:** Irritating effect.

- Sensitization:** No sensitizing effects known.

- Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological information

- Information about elimination (persistence and degradability):**
- Other information:** Not available.
- Ecotoxicological effects:**

- Aquatic toxicity:**

1313-27-5 molybdenum trioxide

EC50	820 mg/l (bacteria)
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EC50/48 h	150 mg/l (daphnia)
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EC50/72 h	>100 mg/l (alga)
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LC50/96 h	130 mg/l (fish)
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· **General notes:**

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According to the criteria of the EU-classification and labelling "dangerous for environment" (93/21/EWG) the substance/ the product has to be classified as non-hazardous for the environment.

13 Disposal considerations

· **European waste catalogue**

16 00 00 WASTES NOT OTHERWISE SPECIFIED IN THE LIST

16 08 00 spent catalysts

16 08 02 spent catalysts containing dangerous transition metals (3) or dangerous transition metal compounds

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

14 Transport information

· **Land transport ADR/RID (cross-border)**

· **ADR/RID class:** -

· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** -

· **Transport/Additional information:** Not dangerous goods according to the above specifications.

15 Regulatory information

· **Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

· **Symbol and hazard designation of product:**



Xn Harmful

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

molybdenum trioxide

· **Risk phrases:**

36/37 Irritating to eyes and respiratory system.

48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

· **Safety phrases:**

22 Do not breathe dust.

25 Avoid contact with eyes.

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

16 Other information

Molybdenum trioxide (CAS 1313-27-5) is currently a subject for reclassification within the EU. This Safety Data Sheet is not a Product Specification. It is based on our present knowledge and experience and it is intended to serve as a guide for safe handling of the product regarding to health and environmental aspects.

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· **Explanation R-phrases**

36/37 Irritating to eyes and respiratory system.

48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

· **Department issuing SDS:** EHSQ-department, Perstorp Specialty Chemicals AB.

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