



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

- **Product details**
- **Trade name:** **PERGASLOW HD-100**
- **Application of the substance / the preparation**
 - Inhibitor
 - For industrial use
- **Manufacturer/Supplier:**
 - PERGAN GmbH
 - Hilfsstoffe für industrielle Prozesse
 - Schlavenhorst 71
 - D-46395 Bocholt
 - Tel: +49 2871 9902-0
 - Fax: +49 2871 9902-50
- **Further information obtainable from:**
 - Environment protection / Security of labour
 - Competent person:
 - * Kathrin Bohland (Sales) e-mail: k.bohland@pergan.com
 - * Christoph Wilting (Environment protection / Security of labour) e-mail: c.wilting@pergan.com
- **Information in case of emergency:**
 - Tel: +49 2871 9902-0

2 Hazards identification

- **Hazard description:**
 -   Xn Harmful
 - N Dangerous for the environment
- **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.
 - R 22 Harmful if swallowed.
 - R 40 Limited evidence of a carcinogenic effect.
 - R 41 Risk of serious damage to eyes.
 - R 43 May cause sensitisation by skin contact.
 - R 68 Possible risk of irreversible effects.
 - R 50 Very toxic to aquatic organisms.
- **Classification system:**
 - The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

3 Composition/information on ingredients

· **Chemical characterization**

· **Dangerous components:**

CAS: 123-31-9 EINECS: 204-617-8 Index number: 604-005-00-4 Reg.nr.: 05-2116379237-36-0000	1,4-dihydroxybenzene	Carc. Cat. 3, Muta. Cat. 3; Xn, Xi, N; R 22-40-41-43-68-50	>98%
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- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 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:**
 - Take care of personal protection for the first aider.
 - Supply fresh air and to be sure call for a doctor.
 - In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
 - Take affected persons into fresh air and keep quiet.
 - Immediately wash with water and soap and rinse thoroughly.
 - Immediately remove contaminated clothing.
- **After eye contact:**
 - Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
 - Call for a doctor immediately.

5 Fire-fighting measures


- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards caused by the substance, its products of combustion or resulting gases:** Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **Protective equipment:** Do not inhale explosion gases or combustion gases.

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· **Additional information** Self-protection first!

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Inform respective authorities in case of seepage into water course or sewage system.
 Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:** Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Pick up mechanically, collect in a suitable receptacle and dispose in accordance with government regulations.
- **Additional information:** In case of large spillage the environmental authority should be informed.

7 Handling and storage

- **Handling:** Pay attention to the special requirements of your local authorities for handling with dangerous goods.
- **Information for safe handling:** Prevent formation of dust.
Provide suction extractors if dust is formed.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
Before break and at the end of work hands should be thoroughly washed.
Avoid contact with skin and eyes.
While using do not eat, drink or smoke.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:** Pay attention to the special requirements of your local authorities for storing dangerous goods.
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
Use only receptacles specifically permitted for this substance/product.
- **Information about storage in one common storage facility:** Store away from foodstuffs, drinks and feeding stuffs.
- **Further information about storage conditions:**
- **Recommended storage temperature (To maintain quality):** 0 +30°C
- **Storage class:** 10 - 13

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:

123-31-9 1,4-dihydroxybenzene

WEL (Great Britain) Long-term value: 0.5 mg/m³

· **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.
 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 close or long term contact with the skin.
 Do not eat, drink, smoke or sniff while working.
 Use skin protection cream for skin protection.
 Be sure to clean skin thoroughly after work and before breaks.

· **Respiratory protection:** Not necessary if room is well-ventilated.
Use suitable respiratory protective device in case of insufficient ventilation.
Filter A/P2

· **Protection of hands:** Only use chemical-protective gloves with CE-labelling of category III.




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

Protective gloves

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- **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.
Butyl rubber, BR
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
Neoprene
- **Penetration time of glove material** The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**  Tightly sealed goggles
- **Body protection:** Protective work clothing

9 Physical and chemical properties

· General Information	
· Form:	Solid
· Colour:	Colourless
· Odour:	Characteristic
· Change in condition	
· Melting point/Melting range:	172.3°C (Decomp.)
· Boiling point/Boiling range:	287°C
· Flash point:	165°C
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Vapour pressure at 20°C:	<0.1 hPa
· Density at 20°C:	1.328 g/cm ³
· Bulk density:	600 kg/m ³
· Solubility in / Miscibility with	
· water at 20°C:	72 g/l
· pH-value (70 g/l) at 20°C:	3.8
· Segregation coefficient (n-octanol/water): 0.59 log POW	

10 Stability and reactivity

- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No hazardous decomposition products if used and stored according to specifications.
- **Additional information:** Emergency procedures will vary depending on conditions. The customer should have an emergency response plane in place.

11 Toxicological information

- **Acute toxicity:**

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

123-31-9 1,4-dihydroxybenzene

Oral	LD50	302 mg/kg (rattus)
	LDLo	29 mg/kg (homo)
Dermal	LD50	>900 mg/kg (rattus)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.
- **Other information (about experimental toxicology):** After inhalation: Irritations of mucous membranes, coughing, and dyspnoea
Possible damages: pulmonary oedema (Latency time until onset of action.)
After skin contact: Slight irritations. Risk of skin sensitization.
After eye contact: Risk of serious damage to eyes. Risk of corneal clouding.
After swallowing: nausea, vomiting, diarrhoea, dyspnoea, cyanosis

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- **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
- **Sensitisation** May cause sensitisation by skin contact.


12 Ecological information

- **Behaviour in environmental systems:**
- **Mobility and bioaccumulation potential:** BCF: 40. Moderate bioaccumulative (BCF 30 - 100).
- **Ecotoxicological effects:**



· Aquatic toxicity:	
123-31-9 1,4-dihydroxybenzene	
EC50 / 48h	0.29 mg/l (daphnia magna)
IC50 / 72h	0.335 mg/l (selenastrum capricornutum)
LC50 / 96h	0.044 mg/l (pimephales promelas)

- **Remark:** Very toxic for fish
- **General notes:** Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- **Product:**
- **Recommendation**  Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Waste disposal key:** Please contact your hazardous waste disposers to assign the right EWC-(European waste catalog)-number.
- **Uncleaned packaging:**
- **Recommendation:** This material and its container must be disposed of as hazardous waste.


*** 14 Transport information**

· Land transport ADR/RID (cross-border)	
	
· ADR/RID class:	6.1 (T2) Toxic substances.
· Danger code (Kemler):	60
· UN-Number:	2811
· Packaging group:	III
· Hazard label:	6.1
· Description of goods:	2811 TOXIC SOLID, ORGANIC, N.O.S. (contains (HYDROQUINONE)
· RID / GGVSE:	like ADR
· Maritime transport IMDG:	
	
· IMDG Class:	6.1
· UN Number:	2811
· Label	6.1
· Packaging group:	III
· Marine pollutant:	No


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· Proper shipping name:	TOXIC SOLID, ORGANIC, N.O.S. (contains (HYDROQUINONE))
· Air transport ICAO-TI and IATA-DGR:	
	
· ICAO/IATA Class:	6.1
· UN/ID Number:	2811
· Label	6.1
· Packaging group:	III
· Proper shipping name:	TOXIC SOLID, ORGANIC, N.O.S. (contains (HYDROQUINONE))

15 Regulatory information

- **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
N Dangerous for the environment
- **Hazard-determining components of labelling:** 1,4-dihydroxybenzene
- **Risk phrases:**
22 Harmful if swallowed.
40 Limited evidence of a carcinogenic effect.
41 Risk of serious damage to eyes.
43 May cause sensitisation by skin contact.
68 Possible risk of irreversible effects.
50 Very toxic to aquatic organisms.
- **Safety phrases:**
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
57 Use appropriate container to avoid environmental contamination.
60 This material and its container must be disposed of as hazardous waste.
61 Avoid release to the environment. Refer to special instructions/safety data sheets.
- **National regulations:**
- **Other regulations, limitations and prohibitive regulations**
- **Please note:** Take care of the respective local regulations.

· Substance of High Concern = SVHC
None of the ingredients is listed.

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 R-phrases**
22 Harmful if swallowed.
40 Limited evidence of a carcinogenic effect.
41 Risk of serious damage to eyes.
43 May cause sensitisation by skin contact.
50 Very toxic to aquatic organisms.
68 Possible risk of irreversible effects.
- **Department issuing MSDS:** Environment protection / Security of labour
- **Contact:** Tel: +49 2871 9902-0
E-mail: mail@pergan.com
- * **Data compared to the previous version altered.**