

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

- **Product details**
- **Trade name:** **PERGADRY 10**
- **Application of the substance / the preparation** 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
- **Information in case of emergency:** - Tel: +49 2871 9902-0

**2 Composition/information on ingredients**

- **Chemical characterization**

- **Dangerous components:**

CAS: 100-42-5 EINECS: 202-851-5 EU Number: 601-026-00-0	styrene	Xn, Xi; R 10-20-36/38	60-70%
CAS: 1330-20-7 EINECS: 215-535-7 EU Number: 601-022-00-9	xylene	Xn, Xi; R 10-20/21-38	10-20%
CAS: 8002-74-2 EINECS: 232-315-6	Paraffin waxes and Hydrocarbon waxes		5-10%
CAS: 78-83-1 EINECS: 201-148-0 EU Number: 603-108-00-1	butanol	Xi; R 10-37/38-41-67	1.0-2.5%

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

**3 Hazards identification**

- **Hazard description:**



Xn Harmful

- **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 10 Flammable.  
R 20/21 Harmful by inhalation and in contact with skin.  
R 36/38 Irritating to eyes and skin.

- **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**

- **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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

- **After skin contact:**

In case of unconsciousness place patient stably in side position for transportation.  
Take affected persons into fresh air and keep quiet.

- **After eye contact:**

Immediately wash with water and soap and rinse thoroughly.  
Immediately remove contaminated clothing.

- **After swallowing:**

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

**5 Fire-fighting measures**

- **Suitable extinguishing agents:**

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **For safety reasons unsuitable extinguishing agents:**


Water with full jet

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- **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:** Mouth respiratory protective device.  
Do not inhale explosion gases or combustion gases.
- **Additional information:** Cool endangered receptacles with water spray.  
Self-protection first!

**6 Accidental release measures**

- **Person-related safety precautions:** Keep away from ignition sources.  
Take precautionary measures against static discharges.  
Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  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.  
Soak up with absorbant material (e. g. Vermiculit) and dispose of 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:** Keep away from heat and direct sunlight.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.  
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.  
Use only in well ventilated areas.  
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.  
Do not generate flames or sparks.  
Keep product and emptied container away from heat and sources of ignition.  
Take precautionary measures against static discharges.  
 Do not smoke.
- **Information about fire - and explosion protection:** Protect against electrostatic charges.  
Use explosion-proof apparatus / fittings and spark-proof tools.  
Highly volatile, flammable constituents are released during processing.  
Fumes can combine with air to form an explosive mixture.  
Wear shoes with conductive soles.  
 Avoid open flames, sparks, direct sunlight and other sources of ignition.  
Formation of flammable or explosive gas/air-mixtures is possible.  
Keep ignition sources away - Do not smoke.
- **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:** Keep container tightly sealed.  
Store receptacle in a well ventilated area.  
Protect from contamination.
- **Recommended storage temperature (To maintain quality):** +10 .... +20°C
- **Storage class:** 3 A "Flammable liquids" (VCI Guideline)

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**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:**

<b>100-42-5 styrene</b>	
WEL	Short-term value: 1080 mg/m <sup>3</sup> , 250 ppm Long-term value: 430 mg/m <sup>3</sup> , 100 ppm
<b>1330-20-7 xylene</b>	
WEL	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV
<b>8002-74-2 Paraffin waxes and Hydrocarbon waxes</b>	
WEL	Short-term value: 6 mg/m <sup>3</sup> Long-term value: 2 mg/m <sup>3</sup>
<b>78-83-1 butanol</b>	
WEL	Short-term value: 231 mg/m <sup>3</sup> , 75 ppm Long-term value: 154 mg/m <sup>3</sup> , 50 ppm

· **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.  
Avoid contact with the eyes and 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:** 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.  
Use suitable respiratory protective device in case of insufficient ventilation.



Filter A2

· **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

· **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 through 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**

<b>General Information</b>	
· <b>Form:</b>	Fluid
· <b>Colour:</b>	Colourless
· <b>Odour:</b>	Characteristic
<b>Change in condition</b>	
· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	Undetermined.
· <b>Flash point:</b>	27°C
· <b>Self-igniting:</b>	Product is not selfigniting.

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· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Density at 20°C:</b>	0.89 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Segregation coefficient (n-octanol/water):</b>	not determined

## 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:

· <b>LD/LC50 values relevant for classification:</b>		
<b>100-42-5 styrene</b>		
Oral	LD50	316 mg/kg (mus) 5000 mg/kg (rattus)
Inhalative	LC50 / 4h	12 mg/l (rattus)
<b>1330-20-7 xylene</b>		
Oral	LD50	4300 mg/kg (rattus)
Dermal	LD50	2000 mg/kg (cuniculosus)
<b>78-83-1 butanol</b>		
Oral	LD50	2460 mg/kg (rattus)
Dermal	LD50	4200 mg/kg (cuniculosus)

### · Primary irritant effect:

- **on the skin:** Irritating effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.

### · 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

### · Ecotoxicological effects:

· <b>Acquatic toxicity:</b>	
<b>100-42-5 styrene</b>	
EC50 / 48h	4.7 mg/l (daphnia)
EC50 / 5min	5.5 mg/l (bacteria)
IC5 / 8d	>200 mg/l (scenedesmus quadricauda)
LC50 / 96h	25 mg/l (Iepomis macrochirus) 32 mg/l (pimephales promelas)
<b>1330-20-7 xylene</b>	
EC50 / 48h	86 mg/l (leuciscus idus)
EC50 / 96h	14 mg/l (oncorhynchus mykiss)
LC50 / 24h	165 mg/l (daphnia magna)
LC50 / 3h	46 mg/l (chlamyd.angulosa)

### · General notes:

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.

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- **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:** 3 (F1) Flammable liquids.
- **Danger code (Kemler):** 30
- **UN-Number:** 1993
- **Packaging group:** III
- **Hazard label:** 3
- **Description of goods:** 1993 FLAMMABLE LIQUID, N.O.S. (STYRENE MONOMER, STABILIZED, XYLENES)
- **RID / GGVSE:** like ADR

· Maritime transport IMDG:



- **IMDG Class:** 3
- **UN Number:** 1993
- **Label:** 3
- **Packaging group:** III
- **Marine pollutant:** No
- **Proper shipping name:** FLAMMABLE LIQUID, N.O.S. (STYRENE MONOMER, STABILIZED, XYLENES)


· Air transport ICAO-TI and IATA-DGR:



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1993
- **Label:** 3
- **Packaging group:** III
- **Proper shipping name:** FLAMMABLE LIQUID, N.O.S. (STYRENE MONOMER, STABILIZED, XYLENES)

**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

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

- **Risk phrases:** 10 Flammable.  
20/21 Harmful by inhalation and in contact with skin.  
36/38 Irritating to eyes and skin.

- **Safety phrases:** 23 Do not breathe gas/fumes/vapour/spray.  
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.  
60 This material and its container must be disposed of as hazardous waste.

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· **National regulations:**

· **Other regulations, limitations and prohibitive regulations**

· **Please note:** Take care of the respective local regulations.

## 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**

10	Flammable.
20	Harmful by inhalation.
20/21	Harmful by inhalation and in contact with skin.
36/38	Irritating to eyes and skin.
37/38	Irritating to respiratory system and skin.
38	Irritating to skin.
41	Risk of serious damage to eyes.
67	Vapours may cause drowsiness and dizziness.

· **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.**