


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

- **1.1 Product identifier**
 - Trade name: **PERGASLOW PK-100**
 - CAS Number: 128-37-0
 - EC number: 204-881-4
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
 - No further relevant information available.
- **Application of the substance / the mixture**
 - Inhibitor
 - For industrial use
- **1.3 Details of the supplier of the safety data sheet**
 - **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:
 - * Sales Manager Germany: Mr. Ansgar Pappenheim, e-mail: a.pappenheim@pergan.com
 - * Export Sales Manager: Mr. Dr. Thomas Philipps, e-mail: dr.philipps@pergan.com
 - * Environment protection / Security of labour : Mr. Christoph Wilting, e-mail: c.wilting@pergan.com
- **1.4 Emergency telephone number:**
 - Tel: +49 2871 9902-0

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
 - Aquatic Acute 1 H400 Very toxic to aquatic life.
 - Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.
- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**
 - The substance is classified and labelled according to the CLP regulation.
 - **Hazard pictograms**
 - 
 - GHS09
 - **Signal word**
 - Warning
 - **Hazard-determining components of labelling:**
 - 2,6-Di-tert-butyl-p-cresol
 - **Hazard statements**
 - H410 Very toxic to aquatic life with long lasting effects.
 - **Precautionary statements**
 - P273 Avoid release to the environment.
 - P391 Collect spillage.
- **2.3 Other hazards**
 - **Results of PBT and vPvB assessment**
 - PBT: Not applicable.
 - vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
 - CAS No. Description: 128-37-0 2,6-di-tert-butyl-p-cresol
 - Identification number(s)
 - EC number: 204-881-4

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
 - **General information:** No special measures required.
 - **After inhalation:** Take affected persons into fresh air and keep quiet.
In case of unconsciousness place patient stably in side position for transportation.
 - **After skin contact:** Clean with water and soap. If possible, also wash with polyethylene glycol 400.
If skin irritation continues, consult a doctor.
 - **After eye contact:** Rinse opened eye for several minutes under running water.
 - **After swallowing:** Rinse out mouth and then drink plenty of water.

Trade name: **PERGASLOW PK-100**


(Contd. of page 1)

- **4.2 Most important symptoms and effects, both acute and delayed**
Do not induce vomiting; call for medical help immediately.
A person vomiting while laying on their back should be turned onto their side.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
Water haze
Fire-extinguishing powder
Foam
- **For safety reasons unsuitable extinguishing agents:** Carbon dioxide
Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information:** Self-protection first!
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Thorough dedusting.
Prevent formation of dust.
Before break and at the end of work hands should be thoroughly washed.
- **Information about fire - and explosion protection:** Product is not explosive. However, formation of explosive air/dust mixtures are possible.
Flammable gas-air mixtures may form in empty receptacles.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
Prevent any seepage into the ground.
Protect against electrostatic charges.
- **Information about storage in bulk containers and storage conditions:**
- **Recommended storage temperature (To maintain quality):** 0 +30 °C
- **7.3 Specific end use(s)** No further relevant information available.

Trade name: **PERGASLOW PK-100**

(Contd. of page 2)

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

128-37-0 2,6-Di-tert-butyl-p-cresolWEL (Great Britain) Long-term value: 10 mg/m³· **DNELs****128-37-0 2,6-Di-tert-butyl-p-cresol**

Dermal	DNEL Longterm System	8.3 mg/kg bw/day (Worker)
		5 mg/kg bw/day (Comsumer)
Inhalative	DNEL Longterm System	5.8 mg/m ³ (Worker)
		1.74 mg/m ³ (Comsumer)

· **PNECs****128-37-0 2,6-Di-tert-butyl-p-cresol**

PNEC Freshwater	0.0004 mg/l (-)
PNEC Seawater	0.0004 mg/l (-)
PNEC Soil	1.04 mg/kg soil dw (-)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **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. Avoid contact with the eyes and skin.

· **Respiratory protection:**

Suitable respiratory protective device recommended.



Filter P2

· **Protection of hands:**

Only use chemical-protective gloves with CE-labelling of category III.

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

· **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.

Synthetic rubber
PVC

· **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

SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

· Form:	Solid
· Colour:	Not determined.
· Odour:	Characteristic
· Odour threshold:	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

· Melting point/Melting range:	69.8 °C
· Boiling point/Boiling range:	265 °C Not applicable.

· **Flash point:** 127 °C

(Contd. on page 4)

GB

Trade name: **PERGASLOW PK-100**

(Contd. of page 3)

· Flammability (solid, gaseous):	Product is not flammable.
· Decomposition temperature:	Not determined.
· Self-igniting:	Not determined.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/dust mixtures are possible.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapour pressure:	Not applicable.
· Density at 20 °C:	1.03 g/cm ³
· Bulk density at 20 °C:	650 kg/m ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
· water at 20 °C:	0.00076 g/l
· Partition coefficient (n-octanol/water):	5.1 log POW
· Viscosity:	
· Dynamic:	Not applicable.
· Kinematic:	Not applicable.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Prevent formation of dust.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No hazardous decomposition products if used and stored according to specifications.

SECTION 11: Toxicological information

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

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

128-37-0 2,6-Di-tert-butyl-p-cresol

Oral	LD50	> 5000 mg/kg (rattus)
Dermal	LD50	>5000 mg/kg (cuniculus)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Low irritant effect
- **Serious eye damage/irritation** Low irritant effect
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**

· **Aquatic toxicity:**

128-37-0 2,6-Di-tert-butyl-p-cresol

EC50 / 48h	0.61 mg/l (daphnia magna)
IC50 / 72h	>0.4 mg/l (alga)

(Contd. on page 5)

Trade name: **PERGASLOW PK-100**

(Contd. of page 4)


LC0 / 96h >0.57 mg/l (piscis)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Water hazard class 2 (German Regulation) (Assessment by list): 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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Waste disposal key:** Please contact your hazardous waste disposers to assign the right EWC-(European waste catalog)-number.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN3077
· 14.2 UN proper shipping name · ADR · IMDG · IATA	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,6-di-tert-butyl-p-cresol) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,6-di-tert-butyl-p-cresol), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,6-di-tert-butyl-p-cresol)
· 14.3 Transport hazard class(es) · ADR  · Class · Label	9 (M7) Miscellaneous dangerous substances and articles. 9
· IMDG, IATA  · Class · Label	9 Miscellaneous dangerous substances and articles. 9
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Product contains environmentally hazardous substances: 2,6-Di-tert-butyl-p-cresol Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information: · ADR · Limited quantities (LQ) · Transport category	5 kg 3

(Contd. on page 6)
GB

Trade name: **PERGASLOW PK-100**

(Contd. of page 5)

· Tunnel restriction code	E
· RID / GGVSEB:	like ADR

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture** No further relevant information available.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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.

- **Department issuing MSDS:** Environment protection / Security of labour
- **Contact:** Tel: +49 2871 9902-0
E-mail: mail@pergan.com
- **Abbreviations and acronyms:**
 - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - ICAO: International Civil Aviation Organisation
 - 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 Harmonised System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - DNEL: Derived No-Effect Level (REACH)
 - PNEC: Predicted No-Effect Concentration (REACH)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1
 - Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1