

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

- **1.1 Product identifier**

PERGAPROP HX-7.5 PP
- **Trade name:**
- **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**

Reaction initiator
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:**

Qualified person: E-mail: msds@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**

The product is not classified, according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**

Void
- **Hazard pictograms**

Void
- **Signal word**

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

2,5-Dimethyl-2,5-di-(tert.-butylperoxy)-hexane
- **Hazard statements**

Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
- **vPvB:**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
- **Determination of endocrine-disrupting properties**

The product does not contain substances with endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Dangerous components:

CAS: 78-63-7 EINECS: 201-128-1 Reg-No.: 01-2119875400-42	2,5-Dimethyl-2,5-di-(tert.-butylperoxy)-hexane	Org. Perox. C, H242; Skin Irrit. 2, H315	5-10%
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- **Additional information:**

For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**

No special measures required.
- **After inhalation:**

Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**

Generally the product does not irritate the skin.
- **After eye contact:**

Rinse opened eye for several minutes under running water.
- **After swallowing:**

If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.


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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **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!

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
- **6.2 Environmental precautions:**  Wear protective equipment. Keep unprotected persons away.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Pick up mechanically.
- **6.4 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.
In case of large spillage the environmental authority should be informed.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
Keep receptacles tightly sealed.
Store in cool, dry place in tightly closed receptacles.
Open and handle receptacle with care.
Prevent formation of dust.
Avoid shock and friction.
- **Information about fire - and explosion protection:** Prevent impact and friction.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Protect from contamination.
Store in a cool place.
- **Recommended storage temperature (To maintain quality):** +10 +40 °C
- **Storage class:** 11
- **7.3 Specific end use(s)** No further relevant information available.

* SECTION 8: Exposure controls/personal protection

- **8.1 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.




· DNELs		
78-63-7 2,5-Dimethyl-2,5-di-(tert.-butylperoxy)-hexane		
Dermal	DNEL Longterm System	15 mg/kg bw/day (Worker)
Inhalative	DNEL Longterm System	11 mg/m3 (Worker)

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· PNECs	
78-63-7 2,5-Dimethyl-2,5-di-(tert.-butylperoxy)-hexane	
PNEC Marinewater sed	7,22 mg/kg sed dw (-)
PNEC Freshwater	0,00065 mg/l (AF 10)
PNEC Freshwater sed	72,2 mg/kg sed dw (-)
PNEC Soil	14,4 mg/kg soil dw (-)
PNEC STP	100 mg/l (AF 10)
PNEC Marinewater	0,00065 mg/l (AF 100)
· Additional information: The lists valid during the making were used as basis.	
· 8.2 Exposure controls	
· Appropriate engineering controls	No further data; see section 7.
· Individual protection measures, such as personal protective equipment	
· General protective and hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals. Immediately remove all soiled and contaminated clothing Store protective clothing separately.
· Respiratory protection:	 Filter P2
· Hand protection	Not required.
· 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.
· 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/face protection	 Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties	
· General Information	
· Physical state	Solid
· Colour:	white - yellowish
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Not applicable.
· Boiling point or initial boiling point and boiling range	Not applicable.
· Flammability	May cause fire.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Decomposition temperature:	+80 °C (SADT)
· pH	Not applicable.
· Viscosity:	
· Kinematic viscosity	Not applicable.
· Dynamic:	Not applicable.
· Solubility	
· water:	Undetermined.
· Partition coefficient n-octanol/water (log value)	not determined
	Not determined.
· Vapour pressure:	Not applicable.
· Density and/or relative density	
· Density:	Not determined.
· Relative density	Not determined.
· Vapour density	Not applicable.
· Particle characteristics	
See section 3.	

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9.2 Other information	
· Appearance:	
· Form:	Granulate
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent content:	
· Water:	0,0 %
· Solids content:	91,7 %
· Change in condition	
· Evaporation rate	Not applicable.
Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void
· Other safety characteristics	
· Active oxygen	0,7 - 0,9 %

SECTION 10: Stability and reactivity

· 10.1 Reactivity	No further relevant information available.
· 10.2 Chemical stability	
· Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
· 10.3 Possibility of hazardous reactions	No dangerous reactions known.
· 10.4 Conditions to avoid	No further relevant information available.
· 10.5 Incompatible materials:	Rapid decomposition by dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy-metal compounds and amines).
· 10.6 Hazardous decomposition products:	No hazardous decomposition products if used and stored according to specifications.

SECTION 11: Toxicological information

· 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008	
· Acute toxicity	Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:	
78-63-7 2,5-Dimethyl-2,5-di-(tert.-butylperoxy)-hexane	
Oral	LD50 >2.000 mg/kg (rattus)
Dermal	LD50 >2.000 mg/kg (rabbit)

· Skin corrosion/irritation	Based on available data, the classification criteria are not met.
· Serious eye damage/irritation	Based on available data, the classification criteria are not met.
· Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
· 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.

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- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability**
- **Degree of elimination:**

· **Classification:****78-63-7 2,5-Dimethyl-2,5-di-(tert.-butylperoxy)-hexane**

Degradation (Not readily biodegradable) (OECD 301 D)

· **12.3 Bioaccumulative potential**· **Partition coefficient: nOctanol/water: [Log Kow]**

78-63-7	2,5-Dimethyl-2,5-di-(tert.-butylperoxy)-hexane	7,34 (20°C)
75-65-0	2-methylpropan-2-ol	0,32 (20°C)
110-05-4	di-tert-butyl peroxide	3,2 (22°C)

· **Bioconcentration factor (BCF)****78-63-7 2,5-Dimethyl-2,5-di-(tert.-butylperoxy)-hexane**

BCF 521-839

- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
- **vPvB:** The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **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.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **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 or ID number**
- **ADR, IMDG, IATA** Void
- **14.2 UN proper shipping name**
- **ADR, IMDG, IATA** Void
- **14.3 Transport hazard class(es)**
- **ADR, IMDG, IATA**
- **Class** Void
- **14.4 Packing group**
- **ADR, IMDG, IATA** Void
- **14.5 Environmental hazards:** Not applicable.
- **14.6 Special precautions for user** Not applicable.
- **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.

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· Transport/Additional information:	No dangerous good according the regulation of transport.
· ADR	
· RID / GGVSEB:	like ADR

* SECTION 15: Regulatory information

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

· Directive 2012/18/EU

· Named dangerous substances

- ANNEX I

None of the ingredients is listed.

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

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.

· Contact:

Tel: +49 2871 9902-0

E-mail: mail@pergan.com

· Version number of previous version:

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· Abbreviations and acronyms:

ADR: Accord relatif au transport international 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
 ELINCS: European List of Notified 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
 Org. Perox. C: Organic peroxides – Type C/D
 Skin Irrit. 2: Skin corrosion/irritation – Category 2

· * Data compared to the previous version altered.