

Printing date 02.01.2024 Version: 10 (replaces version 9) Revision: 15.12.2023

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

· 1.1 Product identifier

• Trade name: PEROXAN A-40 L

· 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

Org. Perox. D H242 Heating may cause a fire.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Repr. 2 H361d Suspected of damaging the unborn child.

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements

· Labelling according to

Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



· Signal word Danger

· Hazard-determining

components of labelling:

4-hydroxy-4-methylpentan-2-one 2,4-Pentadione, peroxide

Hazard statements H242 Heating may cause a fire.
H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction. H361d Suspected of damaging the unborn child.

H335 May cause respiratory irritation.

Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P220 Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy metal compounds and amines).

P234 Keep only in original packaging. P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.
IF IN EYES: Rinse cautiously wit

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P410 Protect from sunlight.
P411+P235 Store at temperatures not exceeding +25°C. Keep cool.

P420 Store separately.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations

· 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 propertiesThe product does not contain substances with endocrine disrupting properties.

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SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Dangerous components:		
CAS: 123-42-2 EINECS: 204-626-7 Index number: 603-016-00-1 Reg-No.: 01-2119473975-21	4-hydroxy-4-methylpentan-2-one Flam. Liq. 3, H226; Repr. 2, H361d; Eye Irrit. 2, H319; STOT SE 3, H335 Specific concentration limit: Eye Irrit. 2; H319: C ≥ 10 %	50-60%
CAS: 13784-51-5 EINECS: 237-438-9 Reg-No.: 01-2119965139-28	2,4-Pentadione, peroxide Alternative CAS number: 37187-22-7 Org. Perox. D, H242; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-40%
CAS: 123-54-6 EINECS: 204-634-0 Index number: 606-029-00-0 Reg-No.: 01-2119458968-15	pentane-2,4-dione Flam. Liq. 3, H226; Acute Tox. 3, H311; Acute Tox. 3, H331; Acute Tox. 4, H302	1-5%
CAS: 7722-84-1 EINECS: 231-765-0 Index number: 008-003-00-9 Reg-No.: 01-2119485845-22	hydrogen peroxide solution Ox. Liq. 1, H271; Skin Corr. 1A, H314; Acute Tox. 4, H302; Acute Tox. 4, H332; STOT SE 3, H335; Aquatic Chronic 3, H412 Specific concentration limits: Skin Corr. 1A; H314: $C \ge 70$ % Skin Corr. 1B; H314: 50 % $\le C < 70$ % Skin Irit. 2; H315: 35 % $\le C < 50$ % Eye Dam. 1; H318: $C \ge 8$ % Eye Irrit. 2; H319: 5 % $\le C < 8$ % STOT SE 3; $C \ge 35$ % Ox. Liq. 1; H271: $C \ge 70$ % Ox. Liq. 2; H272: 50 % $\le C < 70$ %	1-5%
· 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:

Take care of personal protection for the first aider.

· After inhalation: Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Take affected persons into fresh air and keep quiet.

· After skin contact: 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. If symptoms persist, consult a doctor.

After swallowing: If symptoms persist consult doctor.

· 4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate

medical attention and special

No further relevant information available. treatment needed

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.

No further relevant information available.

Hydrocarbons, carbondioxide and -monoxid.

· 5.3 Advice for firefighters

· Protective equipment: Do not inhale explosion gases or combustion gases. Additional information Cool endangered receptacles with water spray.

Self-protection first!

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources.

In case of further temperature should be cooled with waterspray from a safe distance.

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Wear breathing apparatus with filter A during decomposition of materials.

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:

Ensure adequate ventilation.

Large quantities should be diluted with suitable desensitation agent to a concentration below 10 % before

disposal.

Soak up with absorbant material (e. g. Vermiculit) and dispose of in accordance with government

regulations.

· 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

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.

Do not refill residue into storage receptacles. Restrict the quantity stored at the work place.

Use only in well ventilated areas.

Before break and at the end of work hands should be thoroughly washed.

Only use tools made of suitable materials (e. g. polyethylene or stainless steel).

Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy-

metal compounds and amines). Avoid contact with skin and eyes. While using do not eat, drink or smoke.

Avoid shock and friction.



Do not smoke.

Information about fire - and explosion protection:

Protect from heat.

Prevent impact and friction.

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.

· 7.2 Conditions for safe storage, including any incompatibilities

Storage:
 Requirements to be met by

Pay attention to the special requirements of your local autorithies for storing dangerous goods.

storerooms and receptacles:

Store only in the original receptacle. Prevent any seepage into the ground.

Use only receptacles specifically permitted for this substance/product.

Information about storage in one common storage facility:

Do not store or park organic peroxide together with heavy metal compounds and amines.

Store away from foodstuffs, drinks and feeding stuffs.

Further information about storage conditions:

Keep container tightly sealed. Protect from heat and direct sunlight.

Protect from contamination.

Recommended storage temperature (To maintain quality):

+5 +25 °C

Storage class: 5.3

7.3 Specific end use(s) No further relevant information available

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123-42-2 4-hydroxy-4-methylpentan-2-one

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SECTION 8: Exposure controls/personal protection

WEL (Great Britain) Short-term value: 362 mg/m³, 75 ppm

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

· 8.1 Control parameters

		g-term value: 241 mg/m³, 50 ppm	
-	7722-84-1 hydrogen peroxide solution		
ŀ	WEL (Great Britain) Short-term value: 2,8 mg/m³, 2 ppm		
	Long-term value: 1,4 mg/m³, 1 ppm		
Ĭ	DNELs		
	123-42-2 4-hydroxy-4-methylpentan-2-one		
ı	Dermal DNEL Longto	m System 467 mg/kg bw/day (Worker)	
	Inhalative DNEL Longton	m System 32,6 mg/m3 (Worker)	
Ī	13784-51-5 2,4-Pentad	ne, peroxide	
	Dermal DNEL Longto	m System 5 mg/kg bw/day (Worker)	
	Inhalative DNEL Longton	m System 4,41 mg/m3 (Worker)	
	123-54-6 pentane-2,4-dione		
	Dermal DNEL Longto	m System 12 mg/kg bw/day (Worker)	
	Inhalative DNEL Longton	m System 84 mg/m3 (Worker)	
	7722-84-1 hydrogen peroxide solution		
	Inhalative DNEL Longton	m Local 1,4 mg/m3 (Worker)	
	PNECs		
	123-42-2 4-hydroxy-4-methylpentan-2-one		
	PNEC Marinewater sed	0,74 mg/kg sed dw	
	PNEC Freshwater	2 mg/l (AF 50)	
	PNEC Freshwater sed	7,4 mg/kg sed dw	
	PNEC Soil	0,31 mg/kg soil dw	
	PNEC STP	100 mg/l (AF 10)	
	PNEC Marinewater	0,2 mg/l (AF 500)	
	13784-51-5 2,4-Pentad	/ I	
	PNEC Marinewater sed	0,153 mg/kg sed dw (-)	

123-54-6 pentane-2,4-dione

PNEC Freshwater

PNEC Soil

PNEC STP **PNEC Marinewater**

PNEC Freshwater sed

PNEC Marinewater sed | 0,191 mg/kg sed dw **PNEC Freshwater** 0,2 mg/l (AF 50) PNEC Freshwater sed 1,909 mg/kg sed dw PNEC Soil 0,193 mg/kg soil dw (-) PNEC STP 1,32 mg/l (AF 10) **PNEC Marinewater** 0,02 mg/l (AF 500)

0,17 mg/l (AF 10)

1,53 mg/kg sed dw (-)

0,2 mg/kg soil dw (-) 6,2 mg/l (AF 10)

0,017 mg/l (AF 100)

7722-84-1 hydrogen peroxide solution

PNEC Marinewater sed 0,047 mg/kg sed dw 0,013 mg/l (AF 50) **PNEC Freshwater** 0,047 mg/kg sed dw PNEC Freshwater sed PNEC Soil 0,002 mg/kg soil dw PNEC STP 4,66 mg/l (AF 100) **PNEC Marinewater** 0,013 mg/l (AF 50)

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

The usual precautionary measures are to be adhered to when handling chemicals. hygienic measures:

Keep away from foodstuffs, beverages and feed.

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Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work.

Store protective clothing separately

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 device when it exceed exposure limit and when insufficiently ventilated.

Filter A2

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

Protective gloves

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

· Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of

Fluid

Colourless

Characteristic

Not applicable.

Not applicable.

May cause fire.

Not determined.

Not determined. > SADT

+60 °C (SADT)

Not determined.

Not determined.

12 - 49 mPas

Undetermined.

not determined Not determined.

Not determined.

Not determined.

Not determined.

1,03 g/cm³

Not determined.

quality and varies from manufacturer to manufacturer.

Butvl 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

Eye/face 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

· Physical state · Colour:

· Odour:

Odour threshold:

· Melting point/freezing point:

· Boiling point or initial boiling point and boiling range

Flammability

· Lower and upper explosion limit

· Lower:

Upper:

· Flash point: · Decomposition temperature:

· pH

· Viscosity:

Kinematic viscosity

Dynamic at 20 °C:

· Solubility

· Partition coefficient n-octanol/water (log value)

· Vapour pressure:

Density and/or relative density

Relative density · Vapour density

Density at 20 °C:

 9.2 Other information · Appearance:

· Form:

Fluid

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Important information on protection of health and en	vironment,
and on safety.	
Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour
	mixtures are possible.
· Change in condition	
· Evaporation rate	Not determined.
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 gas	ses in
contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Heating may cause a fire.
Corrosive to metals	Void
· Desensitised explosives	Void
Other safety characteristics	
· Active oxygen	4,0 - 4,4 %

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

10.2 Chemical stability Thermal decomposition /

conditions to be avoided:

SADT (Self Accelerating Decomposition Temperature) is the lowest temperature at which self accelerating decomposition may occur with substance in the packaging as used in transport. A dangerous selfaccelerating decomposition reaction and, under certain circumstances, explosion or fire can be cause

decomposition at and above the temperature. Contact with incompatible substances can cause

decomposition at or below the SADT.

No decomposition if used and stored according to specifications.

To avoid thermal decomposition do not overheat.

· 10.3 Possibility of hazardous

reactions

10.4 Conditions to avoid

· 10.5 Incompatible materials:

· Additional information:

Self-accelerating decomposition at SADT. No further relevant information available.

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:

Hvdrocarbons, carbondioxide and -monoxid.

No hazardous decomposition products if used and stored according to specifications.

Emergency procedures will vary depending on conditions. The customer should have an emergency

response plane in place.

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	· LD/LC50 values relevant for classification:			
123-42-2	123-42-2 4-hydroxy-4-methylpentan-2-one			
Oral	LD50	3.002 mg/kg (rattus)		
13784-51-	13784-51-5 2,4-Pentadione, peroxide			
Oral	LD50	>2.000 mg/kg (rattus)		
123-54-6	123-54-6 pentane-2,4-dione			
Oral	LD50	575 mg/kg (rattus)		
Dermal	LD50	790 mg/kg (rattus)		
Inhalative	LC50 / 4h	5,1 mg/l (rattus)		

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· Skin corrosion/irritation Based on available data, the classification criteria are not met.

· Serious eye damage/irritation Causes serious eye irritation.

· Respiratory or skin

sensitisation

May cause an allergic skin reaction.

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 Suspected of damaging the unborn child.

STOT-single exposure May cause respiratory irritation.

· 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.

11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

13784-51-5 2,4-Pentadione, peroxide

EC50 / 72h 5,4 mg/l (alga (Süsswasser))

LC50 / 96h 67,7 mg/l (piscis)

EC50 / 48h 7,1 mg/l (daphnia magna)

123-54-6 pentane-2,4-dione

LC50 / 96h | 72 mg/l (oncorhynchus mykiss)

EC50 / 48h 75 mg/l (daphnia magna)

12.2 Persistence and degradability

· Degree of elimination:

123-42-2 4-hydroxy-4-methylpentan-2-one

Degradation (Readily biodegradable) (OECD 301 A)

13784-51-5 2,4-Pentadione, peroxide

Degradation (Readily biodegradable) (OECD 301 D)

123-54-6 pentane-2,4-dione

Degradation (Readily biodegradable) (OECD 301 C)

7722-84-1 hydrogen peroxide solution

Degradation (Readily biodegradable)

12.3 Bioaccumulative potential

· Partition coefficient: nOctanol/water: [Log Kow]			
	4-hydroxy-4-methylpentan-2-one	-0,09 (20°C)	
13784-51-5	2,4-Pentadione, peroxide	1,1 (20°C)	
123-54-6	pentane-2,4-dione	0,68 (20°C)	
7722-84-1	hydrogen peroxide solution	-1,57 (20°C)	
102-82-9	tributylamine	3,34 (25 °C)	

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

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

· 12.6 Endocrine disrupting

The product does not contain substances with endocrine disrupting properties. 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.

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SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation



After diluting with a suitable desentisation agent to 10 %, the solution must be supplied to a special treatment (e. g. thermal utilization) under observance of all official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage

· Waste disposal key:

Please contact your hazardous waste disposers to assign the right EWC-(European waste catalog)-

· Uncleaned packaging:

· Limited quantities (LQ) · Excepted quantities (EQ)

· Recommendation:	This material and its container must be disposed of as hazardous waste.	
SECTION 14: Transport info	rmation	
· 14.1 UN number or ID number · ADR, IMDG, IATA	UN3105	
· 14.2 UN proper shipping name · ADR	UN3105 ORGANIC PEROXIDE TYPE D, LIQUID (ACETYL ACETONE PEROXIDE)	
· IMDG, IATA	ORGANIC PEROXIDE TYPE D, LIQUID (ACETYL ACETONE PEROXIDE)	
· 14.3 Transport hazard class(es)		
· ADR		
· Class · Label	5.2 (P1) Organic peroxides. 5.2	
· IMDG, IATA		
•		
· Class · Label	5.2 Organic peroxides.5.2	
· 14.4 Packing group · ADR, IMDG, IATA	Void	
14.5 Environmental hazards:	Not applicable.	
14.6 Special precautions for use Stowage Category Stowage Code Segregation Code	Warning: Organic peroxides. D SW1 Protected from sources of heat. SG35 Stow "separated from" SGG1-acids SG36 Stow "separated from" SGG18-alkalis. SG72 See 7.2.6.3.2.	
· 14.7 Maritime transport in bulk	according to IMO instruments Not applicable.	
· Transport/Additional information	on:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code	125 ml Code: E0 Not permitted as Excepted Quantity 2 D	
· RID / GGVSEB:	like ADR	
11D / GG VOLD.	IIVG VDI/	

125 ml Code: E0

Not permitted as Excepted Quantity



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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.

· Seveso category P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES

· Qualifying quantity (tonnes) for the application of lower-tier

requirements Qualifying quantity (tonnes) for

the application of upper-tier

requirements 200 t

REGULATION (EC) No

1907/2006 ANNEX XVII Conditions of restriction: 3

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

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:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Abbreviations and acronyms:

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 Flam. Liq. 3: Flammable liquids — Category 3 Ox. Liq. 1: Oxidizing liquids — Category 1 Org. Perox. D: Organic peroxides — Type C/D Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 3: Acute toxicity – Category 3

Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Repr. 2: Reproductive toxicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· * Data compared to the previous version altered.

MT -