

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Netherlands

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

1.1 Product identifier

Product name : Hempel's Degreaser 99611
Product identity : 9961100000, 00134350
Product type : cleaner

1.2 Relevant identified uses of the substance or mixture and uses advised against

Field of application : ships and shipyards.
Identified uses : Consumer applications, Industrial applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details : Hempel (The Netherlands) B.V.
Karel Doormanweg 7c
3115 JD Schiedam
Nederland
Tel: +31 10 4454000
Fax: +31 10 4600883
hempel@hempel.com
Date of issue : 19 February 2025
Date of previous issue : 23 November 2023.

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)

+31 10 4454000 (08.00 - 17.00)
Nationaal Vergiftigingen Informatie Centrum (NVIC):
088 755 8000

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226	FLAMMABLE LIQUIDS
Acute Tox. 4, H302	ACUTE TOXICITY (oral)
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation)
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/ EYE IRRITATION
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation)
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects)

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Danger
Hazard statements : H226 - Flammable liquid and vapor.
H302 + H332 - Harmful if swallowed or if inhaled.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.

Precautionary statements :

General : Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
Response : IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 2: Hazards identification

Hazardous ingredients :
butan-1-ol
xylene
ethylbenzene

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Yes, applicable.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≥25 - ≤50	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 ATE [Oral] = 790 mg/kg	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 ATE [Dermal] = 1100 mg/kg ATE [Inhalation (gases)] = 5000 ppm	[1] [2]
propylene carbonate	REACH #: 01-2119537232-48 EC: 203-572-1 CAS: 108-32-7 Index: 607-194-00-1	≥10 - ≤25	Eye Irrit. 2, H319 -	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥5 - <10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 ATE [Inhalation (gases)] = 4500 ppm	[1] [2]
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≤0.3	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 See Section 16 for the full text of the H statements declared above.	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit, see section 8.

Detergents - Regulation (EC) No 907/2006

Product/ingredient name	CAS no.	%	Class of constituent
butan-1-ol	71-36-3	10% or more	aromatic hydrocarbons
xylene	1330-20-7	10% or more	aromatic hydrocarbons
propylene carbonate	108-32-7	10% or more	aromatic hydrocarbons
ethylbenzene	100-41-4	1% or over, but less than 10%	aromatic hydrocarbons
toluene	108-88-3	0,1% or over, but less than 1%	aromatic hydrocarbons
water	7732-18-5	less than 0,1%	
cumene	98-82-8	less than 0,1%	
propyleneglycol	57-55-6	less than 0,1%	

SECTION 4: First aid measures

4.1 Description of first aid measures

General :	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice.
Inhalation :	Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately.
Skin contact :	Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Remove contaminated clothing and shoes.
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
Protection of first-aiders :	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact :	Causes serious eye damage.
Inhalation :	Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact :	Causes skin irritation.
Ingestion :	Harmful if swallowed. Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact :	Adverse symptoms may include the following: pain watering redness
Inhalation :	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact :	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion :	Adverse symptoms may include the following: stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician :	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media : Recommended: alcohol resistant foam, CO₂, powders, water spray.
Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous combustion products : Decomposition products may include the following materials: carbon oxides

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024) [xyleen, o-, m-, p-isomeren] Absorbed through skin. TWA 8 hours: 210 mg/m ³ . STEL 15 minutes: 442 mg/m ³ . STEL 15 minutes: 100 ppm. TWA 8 hours: 47.5 ppm. EU OEL (Europe, 1/2022) [xylene, mixed isomers] Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 221 mg/m ³ . STEL 15 minutes: 100 ppm. STEL 15 minutes: 442 mg/m ³ .
ethylbenzene	Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024) Absorbed through skin. TWA 8 hours: 215 mg/m ³ . STEL 15 minutes: 430 mg/m ³ . STEL 15 minutes: 97.3 ppm. TWA 8 hours: 48.6 ppm. EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 100 ppm. TWA 8 hours: 442 mg/m ³ . STEL 15 minutes: 200 ppm. STEL 15 minutes: 884 mg/m ³ .
toluene	Ministry of Social Affairs and Employment, Legal limit values (Netherlands, 5/2024) TWA 8 hours: 150 mg/m ³ . STEL 15 minutes: 384 mg/m ³ . STEL 15 minutes: 100 ppm. TWA 8 hours: 39 ppm. EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 192 mg/m ³ . TWA 8 hours: 50 ppm. STEL 15 minutes: 384 mg/m ³ . STEL 15 minutes: 100 ppm.

Biological exposure indices

Product/ingredient name	Exposure limit values
No exposure limit value known.	

Recommended monitoring procedures

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

Not applicable.

Predicted effect concentrations

Not applicable.

8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

General :

Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.

SECTION 8: Exposure controls/personal protection



- Hygiene measures :** Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.
- Eye/face protection :** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Hand protection :** Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.
 Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:
 Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton®
 May be used: nitrile rubber (>0.3 mm), neoprene rubber (>0.1 mm), butyl rubber (>0.5 mm), nitrile rubber (>0.1 mm)
 Short term exposure: natural rubber (latex) (>0.4 mm), polyvinyl chloride (PVC), butyl rubber (>0.3 mm)
- Body protection :** Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.
 Wear suitable protective clothing. Always wear protective clothing when spraying.
 Chemical-resistant apron.
- Respiratory protection :** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Physical state :** Liquid.
- Color :** Transparent
- Odor :** Solvent-like
- pH :** Testing not relevant or not possible due to nature of the product.
- Melting point/freezing point :** Testing not relevant or not possible due to nature of the product.
- Boiling point/boiling range :** Testing not relevant or not possible due to nature of the product.
- Flash point :** Closed cup: 28°C (82.4°F)
- Evaporation rate :** Testing not relevant or not possible due to nature of the product.
- Flammability :** Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
- Vapor pressure :**

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
ethylbenzene	9.30076	1.2				

- Vapor density :** Not available.
- Specific gravity :** 0.89 g/cm³
- Partition coefficient (LogKow) :** Testing not relevant or not possible due to nature of the product.
- Auto-ignition temperature :**

SECTION 9: Physical and chemical properties

Ingredient name	°C	°F	Method
butan-1-ol	355	671	EU A.15

Decomposition temperature : Testing not relevant or not possible due to nature of the product.

Viscosity : Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.

Explosive properties : Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Oxidizing properties : Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 100 %

Water % by weight : Weighted average: 0 %

VOC content : 709.2 g/l

TOC Content : Weighted average: 528 g/l

Solvent Gas : Weighted average: 0.245 m³/l

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.
Reactive or incompatible with the following materials: reducing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Direct contact with the eyes can cause irreversible damage, including blindness.

Acute toxicity

SECTION 11: Toxicological information

Product/ingredient name	Result	Dose / Exposure	Effects
butan-1-ol	Rabbit - Dermal - LD50	3400 mg/kg	Toxic effects: Eye - Corneal damage Cardiac - Pulse rate Lung, Thorax, or Respiration - Dyspnea Toxic effects: Liver - Fatty liver degeneration Kidney, Ureter, and Bladder - Other changes Blood - Other changes
	Rat - Oral - LD50	790 mg/kg	
xylene	Rat - Inhalation - LC50 Vapor	24000 mg/m ³ [4 hours]	
	Rabbit - Dermal - LD50	>4200 mg/kg	
	Rat - Oral - LD50	3523 mg/kg	Toxic effects: Liver - Other changes Kidney, Ureter, and Bladder - Other changes
	Rat - Inhalation - LC50 Vapor	6350 ppm [4 hours]	
propylene carbonate	Rat - Inhalation - LC50 Gas.	5000 ppm [4 hours]	
	Rat - Dermal - LD50	>2000 mg/kg	
ethylbenzene	Rat - Oral - LD50	33520 mg/kg	
	Rat - Oral - LD50	3500 mg/kg	
	Rabbit - Dermal - LD50	>5000 mg/kg	
toluene	Rat - Oral - LD50	636 mg/kg	
	Rat - Inhalation - LC50 Vapor	>20 mg/l [4 hours]	

Acute toxicity estimates

Product/ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapors) mg/l	Inhalation (dusts and mists) mg/l
Hempel's Degreaser 99611	1581.6	4449.3	16453.0	215.7	
butan-1-ol	790	3400		24	
xylene	3523	1100	5000		
propylene carbonate	33520				
ethylbenzene	3500		4500	11	

Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
butan-1-ol	Rabbit - Eyes - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 2 milligrams
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 20 milligrams
xylene	Rabbit - Eyes - Severe irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 5 milligrams
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 500 milligrams
propylene carbonate	Rabbit - Skin - Irritant		Amount/concentration applied: 60 milligrams
	Rabbit - Eyes - Moderate irritant		Amount/concentration applied: 100 milligrams Intermittent
	Human - Skin - Moderate irritant	Duration of treatment/ exposure: 72 hours	Amount/concentration applied: 500 milligrams
	Rabbit - Skin - Moderate irritant		Amount/concentration applied: 15 milligrams
ethylbenzene	Rabbit - Skin - Mild irritant	Duration of treatment/ exposure: 24 hours	
	Rabbit - Respiratory - Mild irritant		
	Rabbit - Eyes - Mild irritant		
	Rabbit - Eyes - Mild irritant		
toluene		Duration of treatment/ exposure: 0.5 minutes	Amount/concentration applied: 100 mg
	Rabbit - Skin - Moderate irritant	Duration of treatment/ exposure: 24 hours	Amount/concentration applied: 20 mg

Sensitizer

No known data available in our database.

Mutagenic effects

No known data available in our database.

Carcinogenicity

No known data available in our database.

Reproductive toxicity

No known data available in our database.

SECTION 11: Toxicological information

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
butan-1-ol toluene	Category 3 Category 3 Category 3		Respiratory tract irritation Narcotic effects Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene toluene	Category 2 Category 2	- -	hearing organs -

Aspiration hazard

Product/ingredient name	Result
ethylbenzene toluene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

No known significant effects or critical hazards.

11.2 Information on other hazards

Endocrine disrupting properties : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses.

Product/ingredient name	Result	Species	Exposure
butan-1-ol ethylbenzene toluene	Acute - LC50 Acute - EC50 Chronic - NOEC - Fresh water Chronic - NOEC - Fresh water Chronic - NOEC - Fresh water	Fish Daphnia Algae - Green algae - <i>Pseudokirchneriella subcapitata</i> Daphnia - Water flea - <i>Daphnia magna</i> Algae - Green algae - <i>Pseudokirchneriella subcapitata</i>	1.376 mg/l [96 hours] 1328 mg/l [96 hours] <1000 µg/l [96 hours] 1000 µg/l [21 days] <500000 µg/l [96 hours]

12.2 Persistence and degradability

Product/ingredient name	Test	Result	
butan-1-ol xylene propylene carbonate ethylbenzene toluene	OECD Ready Biodegradability - Closed Bottle Test OECD Ready Biodegradability - Manometric Respirometry Test OECD Ready Biodegradability - CO ₂ Evolution Test	92% [20 days] >60% [28 days] - Readily 90 - 98% [28 days] - Readily >70% [28 days] 83.5 - 87.7% [29 days] - Readily >70% [28 days] - Readily 100% [14 days] - Readily	
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
butan-1-ol xylene propylene carbonate ethylbenzene toluene			Readily Readily Readily Readily Readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
butan-1-ol	1	3.16	Low
xylene	3.12	8.1 - 25.9	Low
propylene carbonate	-0.41	-	Low
ethylbenzene	3.6	-	Low
toluene	2.73	90	Low


12.4 Mobility in soil

Soil/Water partition coefficient

Product/ingredient name	logK _{oc}	K _{oc}
butan-1-ol	0.51	3.22078
xylene	1.59	39
propylene carbonate	1.36	22.7124
ethylbenzene	2.23	170.406
toluene	2.07	117.115

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
butan-1-ol	No	No	No	No	No	No	No
xylene	No	No	No	No	No	No	No
propylene carbonate	No	No	No	No	No	No	No
ethylbenzene	No	No	No	No	No	No	No
toluene	No	No	No	No	No	No	No

Mobility :  The product does not meet the criteria to be considered as a PMT or vPvM.


12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]


Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
butan-1-ol	No	No	No	No	No	No	No
xylene	No	No	No	No	No	No	No
propylene carbonate	No	No	No	No	No	No	No
ethylbenzene	No	No	No	No	No	No	No
toluene	No	No	No	No	No	No	No

Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
butan-1-ol	No	No	No	No	No	No	No
xylene	No	No	No	No	No	No	No
propylene carbonate	No	No	No	No	No	No	No
ethylbenzene	No	No	No	No	No	No	No
toluene	No	No	No	No	No	No	No

Conclusion/Summary :  The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

 The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.

European waste catalogue (EWC) : 08 01 11*




Packaging

SECTION 13: Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN / ID no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN1263	PAINT RELATED MATERIAL	3 	III	No.	<u>Tunnel code</u> (D/E)
IMDG Class	UN1263	PAINT RELATED MATERIAL	3 	III	No.	<u>Emergency schedules</u> F-E, S-E
IATA Class	UN1263	PAINT RELATED MATERIAL	3 	III	No.	-

PG* : Packing group

Env.* : Environmental hazards

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles


Not applicable.

Other EU regulations

Seveso category

This product is controlled under the Seveso III Directive.

Seveso category

 P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

Detergents - Regulation (EC) No 907/2006

Contains (EU Detergents Regulation) : 15% or over but less than 30%: aromatic hydrocarbons.

National regulations

Water Discharge Policy (ABM) : B(2) Toxic for aquatic organisms. Decontamination effort: B

National regulations Non-GHS

15.2 Chemical Safety Assessment

Not applicable.

SECTION 16: Other information

Abbreviations and acronyms :

ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 EUH statement = CLP-specific Hazard statement
 RRN = REACH Registration Number
 DNEL = Derived No Effect Level
 PNEC = Predicted No Effect Concentration

Full text of abbreviated H statements :

H225 Highly flammable liquid and vapor.
 H226 Flammable liquid and vapor.
 H302 Harmful if swallowed.
 H304 May be fatal if swallowed and enters airways.
 H312 Harmful in contact with skin.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H361d Suspected of damaging the unborn child.
 H373 May cause damage to organs through prolonged or repeated exposure.

Full text of classifications [CLP/GHS] :

Acute Tox. 4 ACUTE TOXICITY - Category 4
 Asp. Tox. 1 ASPIRATION HAZARD - Category 1
 Eye Dam. 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
 Eye Irrit. 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
 Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2
 Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3
 Repr. 2 TOXIC TO REPRODUCTION - Category 2
 Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2
 STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
FLAMMABLE LIQUIDS	On basis of test data
ACUTE TOXICITY (oral)	Calculation method
ACUTE TOXICITY (inhalation)	Calculation method
SKIN CORROSION/IRRITATION	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation)	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects)	Calculation method

Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.