

Activator

Revision date: 18.03.2025

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Activator

Further trade names

Aktivator, Activeur, Activador

UFI: HCY6-AYS2-NH09-J5YS

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Activator: Glass/Metal-Windscreen adhesive

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name: PMA/TOOLS GmbH
Street: Siemensring 42
Place: D-47877 Willich - Germany
Telephone: +49 2154 922230
E-mail: info@pma-tools.de
Contact person: Labor
E-mail: msds@pma-tools.de (Please DO NOT use for requesting Safety Data Sheets.)
Internet: www.pma-tools.de
Responsible Department: Laboratory

1.4. Emergency telephone number:

Telephone number of the company in case of emergencies (24 h):
+49 (0) 700 / 24 112 112 (PMR)
+1 872 5888271 (PMR)

Emergency information services / official advisory body:
<UK> National Poisons Information Service (24 h): 0870 600 6266 (UK only)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Flam. Liq. 2; H225
Eye Irrit. 2; H319
STOT SE 3; H336

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

acetone; propan-2-one; propanone

Signal word: Danger

Pictograms:**Hazard statements**

H225 Highly flammable liquid and vapour.

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H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapour.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of the following substances with non-hazardous additions.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
67-64-1	acetone; propan-2-one; propanone			95 - < 100 %
	200-662-2	606-001-00-8		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
1338-02-9	naphthenic acids, copper salts; copper naphthenate			< 1 %
	215-657-0	029-003-00-5		
	Flam. Liq. 3, Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1; H226 H302 H400 H410			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
67-64-1	200-662-2	acetone; propan-2-one; propanone	95 - < 100 %
	inhalation: LC50 = 76 mg/l (vapours); dermal: LD50 = 20000 mg/kg; oral: LD50 = 5800 mg/kg		
1338-02-9	215-657-0	naphthenic acids, copper salts; copper naphthenate	< 1 %
	oral: ATE = 500 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If unconscious but breathing normally, place in recovery position and seek medical advice.

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After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

After ingestion

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Call a physician immediately.

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

Causes eye irritation. Gastrointestinal complaints, Vomiting, Dizziness, Headache, May cause drowsiness or dizziness.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Water spray jet, Carbon dioxide (CO₂), Foam, Extinguishing powder.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Highly flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration. Use personal protection equipment. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

6.3. Methods and material for containment and cleaning up**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Unsuitable material for taking up: Sawdust (Combustible substance)!

Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. When using do not eat, drink, smoke, sniff.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

Advice on general occupational hygiene

Take off contaminated clothing and wash it before reuse. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances. Reducing agent, Strong acid strong base.

Further information on storage conditions

Recommended storage temperature: 15 - < + 25°C

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
67-64-1	acetone; propan-2-one; propanone			
	Worker DNEL, acute	inhalation	systemic	2420 mg/m ³
	Worker DNEL, acute	inhalation	local	2420
	Worker DNEL, long-term	dermal	systemic	186 mg/kg bw/day
	Worker DNEL, long-term	inhalation	systemic	1210 mg/m ³

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PNEC values

CAS No	Substance	
Environmental compartment		Value
67-64-1	acetone; propan-2-one; propanone	
Freshwater		10,6 mg/l
Marine water		1,06 mg/l
Freshwater sediment		30,4 mg/kg
Marine sediment		3,04 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		29,5 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Use only outdoors or in a well-ventilated area. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. goggles (EN 166).
Avoid contact with eyes and skin.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Wear suitable gloves. (EN 374).

Recommended material: Butyl caoutchouc (butyl rubber)

Thickness of the glove material: $\geq 0,7$ mm

Breakthrough time:: Index No. 2, > 30 Min. / Index No. 6, > 480 Min.

Replace when worn.

Recommendation: Use protective skin cream before handling the product.

Skin protection

Use personal protection equipment.

When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. (89/686/EWG).

Recommended protective clothing articles: compliant EN 14605 / EN 13982.

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Respiratory protection

In case of dangerous gases, vapours or dusts self-contained breathing apparatus or suitable masks and filters need to be advised. In case of inadequate ventilation wear respiratory protection.

Suitable respiratory protection apparatus: Combination filtering device Type AXBEK (EN 14387)

Environmental exposure controls

Do not allow to enter into surface water or drains.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	green
Odour:	sweetish
Odour threshold:	62-140 ppm

Changes in the physical state

Melting point/freezing point:	-94 °C
Boiling point or initial boiling point and boiling range:	56 °C
Flash point:	-20 °C

Flammability

Solid/liquid:	No data available
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Explosive properties

No data available

Lower explosion limits:	2 vol. %
Upper explosion limits:	13 vol. %

Self-ignition temperature

Solid:	No data available
Gas:	No data available

Decomposition temperature:	not determined
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pH-Value (at 20 °C):	5 - 6
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Viscosity / dynamic:	No data available
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Viscosity / kinematic: (at 20 °C)	23,2 mm ² /s
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Flow time:	No data available
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Water solubility:	completely miscible
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Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	log Pow: -0,24
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Vapour pressure: (at 39,5 °C)	533,3 hPa
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Vapour pressure: (at 20,0 °C)	245,3 hPa
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Density (at 25 °C):	0,791 g/cm ³
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Bulk density:	No data available
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Relative vapour density:	No data available
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9.2. Other information

Information with regard to physical hazard classes

Oxidizing properties
Not oxidising.

Other safety characteristics

Solvent separation test:	No data available
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Solid content:	No data available
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Evaporation rate:	No data available
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Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable. Vapours may form explosive mixtures with air.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

There are no data available on the mixture itself.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

Oxidising agent. Pyrophoric or self-heating substances. Reducing agent, Strong acid strong base. Phosphoroxchlorid, Chloroform, peroxides, for example hydrogen peroxide.

10.6. Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation**Acute toxicity**

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
67-64-1	acetone; propan-2-one; propanone				
	oral	LD50 mg/kg	5800	Rat	RTECS
	dermal	LD50 mg/kg	20000	Rabbit	IUCLID
	inhalation (4 h) vapour	LC50	76 mg/l	Rat	
1338-02-9	naphthenic acids, copper salts; copper naphthenate				
	oral	ATE mg/kg	500		

Irritation and corrosivity

Serious eye damage/eye irritation: Causes serious eye irritation.

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

Repeated exposure may cause skin dryness or cracking.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects 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.

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STOT-single exposure

May cause drowsiness or dizziness. (acetone; propan-2-one; propanone)

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**

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

Based on available data, the classification criteria are not met.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
67-64-1	acetone; propan-2-one; propanone					
	Acute fish toxicity	LC50 mg/l	5540	96 h	Oncorhynchus mykiss	
	Acute crustacea toxicity	EC50 mg/l	6100	48 h	Daphnia magna	

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

(Acetone) Partition coefficient: n-octanol/water: Log KOW -0,23 (ECHA)

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
67-64-1	acetone; propan-2-one; propanone	-0,24

12.4. Mobility in soil

The product has not been tested.

(Acetone) Henry's Law Constant: 2,929 Pa m³/mol / 25 °C (ECHA)**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

The waste key according to the European Waste Catalogue (EWC number) refers to the real wastes origin and therefore is not product- but use-oriented. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1090
14.2. UN proper shipping name:	ACETONE
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Classification code:	F1
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1090
14.2. UN proper shipping name:	ACETONE
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



Classification code:	F1
Limited quantity:	1 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1090
14.2. UN proper shipping name:	ACETONE
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3



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Special Provisions: -
 Limited quantity: 1 L
 Excepted quantity: E2
 EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1090
14.2. UN proper shipping name: ACETONE
14.3. Transport hazard class(es): 3
14.4. Packing group: II
 Hazard label: 3



Limited quantity Passenger: 1 L
 Passenger LQ: Y341
 Excepted quantity: E2
 IATA-packing instructions - Passenger: 353
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 364
 IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Combustible liquid.

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 regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Directive 2010/75/EU on industrial emissions: 99,1 % (783,881 g/l)

Directive 2004/42/EC on VOC in paints and varnishes: 99,1 % (783,881 g/l)

Information according to Directive 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

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This data sheet contains changes from the previous version in section(s):
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

Abbreviations and acronyms

ADN: Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways).

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

ATE: Acute Toxicity Estimate.

AwSV: Anlagenverordnung wassergefährdender Stoffe (Regulation on facilities handling substances dangerous to water).

BGI: Berufsgenossenschaftliche Informationen (trade association information).

BGR: Berufsgenossenschaftliche Regeln (trade association regulation).

CAS: Chemical Abstracts Service.

CEN: Comité Européen de Normalisation European (Committee for Standardization).

CLP: Classification, Labelling and Packaging of substances and mixtures (REGULATION (EC) No 1272/2008).

DIN: Deutsches Institut für Normung (German institute for standardization).

DMEL: Derived Minimum Effect Level.

DNEL: Derived No Effect Level.

EC: European Community.

EC50: Half maximal effective concentration.

ECHA: European Chemicals Agency.

EG: Europäische Gemeinschaft (European Community).

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

EN: European Norms.

GHS: Globally Harmonized System of Classification and Labelling of Chemicals.

IATA-DGR: International Air Transport Association - Dangerous Goods Regulations.

IBC: Intermediate Bulk Container.

IC50 / ErC50: Inhibitory concentration, 50 %.

ICAO-TI: International Civil Aviation Organization - Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Code for Dangerous Goods.

ISO: International Organization for Standardization.

IUPAC: International Union for Pure and Applied Chemistry.

LC50: Lethal concentration, 50 %.

LD50: Lethal dose, 50 %.

log Kow (Pow): Partition coefficient n-octanol/water.

LQ: Limited Quantities.

MARPOL: International Convention for the Prevention of Marine Pollution from Ships.

OECD: Organisation for Economic Co-operation and Development.

PBT: persistent, bioaccumulative and toxic.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006).

RID: Règlement concernant le transport International ferroviaire de marchandises Dangereuses (Regulation concerning the International Carriage of Dangerous Goods by Rail).

SVHC: Substances of Very High Concern.

STOT - RE: Specific Target Organ Toxicity - Repeated Exposure.

STOT - SE: Specific Target Organ Toxicity - Single Exposure.

TRGS: Technische Regel für Gefahrstoffe (technical guideline for the handling of hazardous materials).

UFI: Unique Formula Identifier.

UN: United Nations.

VOC: Volatile organic compounds.

vPvB: very persistent and very bioaccumulative.

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WGK: Wassergefährdungsklasse (water hazard class).

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)