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

1.1. Product identifier

PT 800 PLUS

Further trade names

Glass pre-treatment cleaner
Glasvorbehandlungsreiniger
Nettoyant prétraitementp pour verre
Tratamiento pre-liempieza cristales

UFI: SNX8-T3HC-HGSU-SHDR

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

Use of the substance/mixture

Surface pre-treatment

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
Asp. Tox. 1; H304
Skin Irrit. 2; H315
STOT SE 3; H336
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

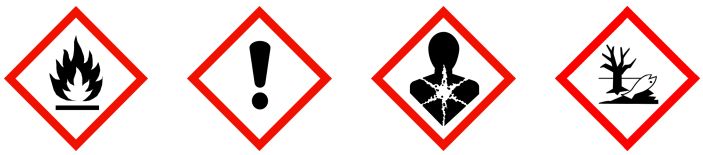
GB CLP Regulation

Hazard components for labelling

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5 % n-hexane
cyclohexane

Signal word: Danger

Pictograms:



Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapour.
P273	Avoid release to the environment.
P280	Wear protective gloves.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P370+P378	In case of fire: Use Foam. Dry extinguishing powder. Carbon dioxide (CO2). to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

2.3. Other hazards

Solvents contained in the product evaporate during processing and their vapors can form explosive/highly inflammable air/vapor mixtures. The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

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

Base: Hydrocarbons, aliphatic
Solvent, Surface pre-treatment

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5 % n-hexane			80 - < 100 %
	921-024-6		01-2119475514-35	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
110-82-7	cyclohexane			10 - < 20 %
	203-806-2	601-017-00-1	01-2119463273-41	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1; H225 H315 H336 H304 H400 H410			
110-54-3	n-hexane			1 - < 3 %
	203-777-6	601-037-00-0	01-2119480412-44	
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 2; H225 H361f H315 H336 H373 H304 H411			

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		
	921-024-6	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5 % n-hexane	80 - < 100 %
	inhalation: LC50 = > 25,2 mg/l (vapours); dermal: LD50 = > 2800 mg/kg; oral: LD50 = > 5840 mg/kg		
110-82-7	203-806-2	cyclohexane	10 - < 20 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		
110-54-3	203-777-6	n-hexane	1 - < 3 %
	inhalation: LC50 = > 31,86 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 16000 mg/kg STOT RE 2; H373: >= 5 - 100		

Labelling for contents according to Regulation (EC) No 648/2004

>= 30 % aliphatic hydrocarbons.

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

Remove casualty to fresh air and keep warm and at rest. If unconscious but breathing normally, place in recovery position and seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician in any case! Observe risk of aspiration if vomiting occurs.

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

Vapours may cause drowsiness and dizziness. May be harmful if swallowed and enters airways. Pneumonia, Pulmonary oedema.
Following skin contact: erythema (redness)

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

Do NOT induce vomiting. Call a physician immediately.
Harmful: may cause lung damage if swallowed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Suitable extinguishing media: Carbon dioxide (CO2), Foam, Water spray jet, Extinguishing powder
Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Gases/vapours, toxic

5.3. Advice for firefighters

Wear personal protection equipment (refer to section 8). In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Use personal protection equipment.
Avoid contact with skin, eyes and clothes.
Remove persons to safety.
Special danger of slipping by leaking/spilling product.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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). Treat the recovered material as prescribed in the section on waste disposal. Disposal: see section 13

6.4. Reference to other sections

Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Remove all sources of ignition.
Provide earthing of containers, equipment, pumps and ventilation facilities.
Use explosion-proof electrical equipment.
Use only antistatically equipped (spark-free) tools.

Take action to prevent static discharges.

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

Store in a well-ventilated place. Store in a cool dry place.
Keep away from heat. Protect from direct sunlight.
storage temperature: 5 - < + 25°C

Hints on joint storage

Do not store together with: Substances, oxidising, Spontaneously flammable.
Keep away from sources of ignition - No smoking.

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/m³	fibres/ml	Category	Origin
110-82-7	Cyclohexane	100	350		TWA (8 h)	WEL
		300	1050		STEL (15 min)	WEL
110-54-3	n-Hexane	20	72		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5 % n-hexane			
Worker DNEL,		dermal	systemic	773 mg/kg bw/day
Worker DNEL,		inhalation	systemic	2035 mg/m³
Consumer DNEL,		dermal	systemic	699 mg/kg bw/day
Consumer DNEL,		inhalation	systemic	608 mg/m³
Consumer DNEL,		oral	systemic	699 mg/kg bw/day
110-82-7	cyclohexane			
Worker DNEL, acute		inhalation	local	700 mg/m³
Worker DNEL, acute		inhalation	systemic	700 mg/m³
Worker DNEL, long-term		inhalation	systemic	700 mg/m³
Worker DNEL, long-term		inhalation	local	700 mg/m³
Worker DNEL, long-term		dermal	systemic	2016 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	412 mg/m³
Consumer DNEL, acute		inhalation	local	412 mg/m³
Consumer DNEL, long-term		dermal	systemic	1186 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	59,4 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	206 mg/m³
Consumer DNEL, long-term		inhalation	local	206 mg/m³
110-54-3	n-hexane			
Consumer DNEL,		inhalation	systemic	16 mg/m³
Worker DNEL,		dermal	systemic	11 mg/kg bw/day
Consumer DNEL,		dermal	systemic	5,3 mg/kg bw/day
Worker DNEL,		inhalation	systemic	75 mg/m³
Consumer DNEL,		oral	systemic	4 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
110-82-7	cyclohexane	
Freshwater		0,207 mg/l
Freshwater (intermittent releases)		0,207 mg/l
Marine water		0,207 mg/l
Freshwater sediment		16,68 mg/kg
Marine sediment		16,68 mg/kg
Micro-organisms in sewage treatment plants (STP)		3,24 mg/l
Soil		3,38 mg/kg
110-54-3	n-hexane	

8.2. Exposure controls




Appropriate engineering controls

Use only outdoors or in a well-ventilated area.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. goggles (EN 166).

Hand protection

Wear suitable gloves. EN ISO 374.
Recommended material:: NBR (Nitrile rubber)
Thickness of the glove material: 0,4 mm
Breakthrough time:: Index No. 2, > 30 Min. / Index No. 6, > 480 Min.
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.
Replace when worn.

Skin protection

Use personal protection equipment. EN 14605 / EN 13982.
When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. 89/686/EWG

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Combination filtering device ABEK-P2 (EN 14387)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	clear, colourless
Odour:	Solvent
Odour threshold:	No data available

		Test method
Changes in the physical state		
Melting point/freezing point:	> -30 °C	
Boiling point or initial boiling point and boiling range:	89 - 107 °C	
Sublimation point:	not determined	
Softening point:	not determined	
Pour point:	not determined	
Flash point:	-15,5 °C	DIN 51755
Flammability		
Solid/liquid:	Combustible liquid.	
Lower explosion limits:	1 vol. %	
Upper explosion limits:	8 vol. %	
Auto-ignition temperature:	268 °C	
Decomposition temperature:	> 200 °C	
pH-Value:	not applicable	

Viscosity / dynamic:	not determined
Viscosity / kinematic: (at 20 °C)	0,61 mm²/s
Flow time:	not determined
Water solubility: (at 20 °C)	Immiscible

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	85 hPa
Vapour pressure: (at 50 °C)	290 hPa
Density (at 20 °C):	0,705 g/cm³
Bulk density:	not determined
Relative vapour density:	0,72
Particle characteristics:	not applicable

9.2. Other information

Information with regard to physical hazard classes

Sustaining combustion: No data available

Other safety characteristics

Evaporation rate: not determined

Further Information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Oxidising agent

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

SECTION 10: Stability and reactivity

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

10.5. Incompatible materials

Oxidising agent

10.6. Hazardous decomposition products

No known hazardous decomposition products. After intended use

SECTION 11: Toxicological information

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

Toxicocinetics, metabolism and distribution

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

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
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5 % n-hexane				
	oral	LD50 > 5840 mg/kg	Rat		
	dermal	LD50 > 2800 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 > 25,2 mg/l	Rat		
110-82-7	cyclohexane				
	oral	LD50 > 5000 mg/kg	Rat		OECD 401
	dermal	LD50 > 2000 mg/kg	Rabbit		OECD 402
110-54-3	n-hexane				
	oral	LD50 16000 mg/kg	Rat		OECD 401
	dermal	LD50 > 2000 mg/kg	Rabbit		
	inhalation (4 h) vapour	LC50 > 31,86 mg/l	Rat		

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

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.

STOT-single exposure

May cause drowsiness or dizziness. (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5 % n-hexane)

STOT-repeated exposure

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

Aspiration hazard

May be fatal if swallowed and enters airways.

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.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5 % n-hexane						
	Acute fish toxicity	LL50	11,4 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		OECD 203
	Acute algae toxicity	ErC50	> 30 - 100 mg/l	72 h	Pseudokirchneriella subcapitata		OECD 201
	Acute crustacea toxicity	EC50	3 mg/l	48 h	Daphnia magna (Big water flea)		OECD 202
	Crustacea toxicity	NOEC	0,17 mg/l	21 d	Daphnia magna (Big water flea)		OECD 211
110-82-7	cyclohexane						
	Acute fish toxicity	LC50	4,53 mg/l	96 h	Pimephales promelas (fathead minnow)		OECD 403
	Acute algae toxicity	ErC50	9,317 mg/l	72 h	Pseudokirchneriella subcapitata		OECD 201
	Acute crustacea toxicity	EC50	0,9 mg/l	48 h			OECD 202
	Algae toxicity	NOEC	0,95 mg/l	3 d	Pseudokirchneriella subcapitata		OECD 201
110-54-3	n-hexane						
	Acute fish toxicity	LC50	2,5 mg/l	96 h	Pimephales promelas	Geiger et al. 1990	
	Acute algae toxicity	ErC50	1-10 mg/l				OECD 201
	Acute crustacea toxicity	EC50	2,1 mg/l	48 h	Daphnia magna (Big water flea)		OECD 202
	Acute bacteria toxicity	EC50	1-10 mg/l ( )				OECD 209

12.2. Persistence and degradability

Regulation (EC) No. 648/2004 [Detergents regulation] - Contains: none Surfactant

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5 % n-hexane			
	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	98%	28	
	Readily biodegradable (according to OECD criteria).			
110-82-7	cyclohexane			
	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	77 %	28	
	Readily biodegradable (according to OECD criteria).			
110-54-3	n-hexane			
	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	81 %	28	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

Readily biodegradable (according to OECD criteria).

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
110-82-7	cyclohexane	3,44
110-54-3	n-hexane	4

BCF

CAS No	Chemical name	BCF	Species	Source
110-82-7	cyclohexane	167	Pimephales promelas (fathead minnow)	QSAR

12.4. Mobility in soil

Product is easily volatile.

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. Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Send to a hazardous waste incinerator facility under observation of official regulations.
Do not allow to enter into surface water or drains.

Contaminated packaging

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 1268
14.2. UN proper shipping name:	PETROLEUM DISTILLATES, N.O.S.
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	640C ADR664
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 1268
14.2. UN proper shipping name:	PETROLEUM DISTILLATES, N.O.S.
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	363 640C
Limited quantity:	1 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1268
14.2. UN proper shipping name:	PETROLEUM DISTILLATES, N.O.S (Petroleum naphta)
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

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

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 1268
14.2. UN proper shipping name:	Petroleum distillates, n.o.s.
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Special Provisions:	A3
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: Yes

Danger releasing substance: Hydrocarbons, liquid, n.o.s

14.6. Special precautions for user

Land transport (ADR/RID): Special Provisions: 640D (D/E)
Inland waterway craft (ADN): Special Provisions: 640D (D/E)
Sea transport (IMDG): not applicable
Air transport (ICAO-TI / IATA-DGR): not applicable

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 57, Entry 75

Directive 2010/75/EU on industrial emissions:	100 %
Directive 2004/42/EC on VOC in paints and varnishes:	705 g/l
Subcategory according to Directive 2004/42/EC:	Preparatory and cleaning - Preparatory, VOC limit value: 850 g/l

Additional information

This product meets the requirements of Regulation (EC) No. 1935/2004 on the limitation of VOC content. VOC value max. 705 g/l

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):	2 - obviously hazardous to water

Additional information

Berufsgenossenschaftliche Informationen (DGUV-Informationen) 621 Solvent

15.2. Chemical safety assessment

For this mixture a chemical safety assessment has been carried out.

SECTION 16: Other information

Changes

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: Untited Nations.
VOC: Volatile organic compounds.
vPvB: very persistent and very bioaccumulative.
WGK: Wassergefährdungsklasse (water hazard class).

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

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.)