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

1.1. Product identifier

PT 77 PrimeEX®

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

Use of the substance/mixture

Cleaner - for professional use only.

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name:	PMA/TOOLS AG
Street:	Siemensring 42
Place:	D-47877 Willich - Germany
Telephone:	+49 2154 922230 Telefax: +49 2154 922255
e-mail:	info@pma-tools.de
Contact person:	Michael Münter
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)

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

Regulation (EC) No. 1272/2008

Hazard categories:
Aerosol: Aerosol 1
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazard Statements:
Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause drowsiness or dizziness.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

ethyl acetate
n-butyl acetate
citral

Signal word: Danger

Pictograms:

Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe Aerosol.
P271	Use only outdoors or in a well-ventilated area.
P410	Protect from sunlight.
P412	Do not expose to temperatures exceeding 50 °C/122 °F.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P314	Get medical advice/attention if you feel unwell.
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.

Additional advice on labelling

Contains: < 0.1 % 1,3-butadiene; buta-1,3-diene (CAS No.106-99-0)

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:

Hazard statements

H222-H229-H317

Precautionary statements

P210-P211-P251-P410-P412

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Aerosol-Active agent-Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68476-85-7	Petroleum gases, liquefied; Petroleum gas			45 - < 55 %
	270-704-2	649-202-00-6		
	Flam. Gas 1, Carc. 1A, Muta. 1B; H220 H350 H340			
141-78-6	ethyl acetate			5 - < 15 %
	205-500-4	607-022-00-5		
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
123-86-4	n-butyl acetate			5 - < 15 %
	204-658-1	607-025-00-1		
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066			
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether			5 - < 10 %
	203-961-6	603-096-00-8		
	Eye Irrit. 2; H319			
64-17-5	ethanol; ethyl alcohol			5 - < 10 %
	200-578-6	603-002-00-5		
	Flam. Liq. 2; H225			
5392-40-5	citral			1 - < 5 %
	226-394-6	605-019-00-3		
	Skin Irrit. 2, Skin Sens. 1; H315 H317			

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

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

Provide fresh air. If unconscious place in recovery position and seek medical advice. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

Rinse skin with water [or shower]. Take off contaminated clothing and wash it before reuse. In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

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

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

Drowsiness, Headache, Dizziness, Vomiting, Dyspnoea. Aerosol/Vapours may cause drowsiness and 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

Co-ordinate fire-fighting measures to the fire surroundings.
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

Extremely flammable aerosol. Vapours can form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.
In case of fire may be liberated: Carbon dioxide (CO2); Carbon monoxide, Gases/vapours, toxic.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

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.
The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.Special danger of slipping by leaking/spilling product.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Stop leak if safe to do so. Collect spillage. Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Danger of explosion.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Provide adequate ventilation.

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

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 eyes and skin. Do not eat, drink or smoke when using this product.

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.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. 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: Food and feedingstuffs, Oxidising agent, Pyrophoric or self-heating substances.

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/m³	fibres/ml	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	WEL
		15	101.2		STEL (15 min)	WEL
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
141-78-6	Ethyl acetate	200	-		TWA (8 h)	WEL
		400	-		STEL (15 min)	WEL
68476-85-7	Liquefied petroleum gas	1000	1750		TWA (8 h)	WEL
		1250	2180		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
64-17-5	ethanol; ethyl alcohol		
Consumer DNEL, acute	inhalation	local	950 mg/m³
Consumer DNEL, acute	dermal	local	950 ppm
Consumer DNEL, long-term	inhalation	systemic	114 mg/m³
Consumer DNEL, long-term	oral	systemic	87 mg/kg bw/day
Consumer DNEL, long-term	dermal	systemic	206 mg/kg bw/day
Worker DNEL, acute	inhalation	local	1900 mg/m³
Worker DNEL, long-term	inhalation	systemic	950 mg/m³
Worker DNEL, long-term	dermal	systemic	343 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
64-17-5	ethanol; ethyl alcohol	
Freshwater		0,96 mg/l
Freshwater (intermittent releases)		2,75 mg/l
Marine water		0,79 mg/l
Freshwater sediment		3,6 mg/kg
Marine sediment		2,9 mg/kg
Secondary poisoning		0,72 mg/kg
Micro-organisms in sewage treatment plants (STP)		580 mg/l
Soil		0,63 mg/kg

8.2. Exposure controls




Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. 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.

Eye/face protection

Suitable eye protection: goggles. (EN 166).

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..
Recommendation: Use protective skin cream before handling the product.

Wear suitable gloves. (EN 374).
Recommended material: NBR (Nitrile rubber)
Thickness of the glove material: >= 0,4 mm
Breakthrough time (maximum wearing time): > 480 Min.
Replace when worn.

Skin protection

Use personal protection equipment. Wear anti-static footwear and clothing (EN 1149).

Respiratory protection

In case of inadequate ventilation wear respiratory protection. (occupational exposure limit value / exceeding exposure limit values). Combination filtering device (EN 14387) Filter type A, (brown). Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	light yellow
Odour:	characteristic

		Test method
pH-Value:	not determined	
Changes in the physical state		
Melting point:	not determined	
Initial boiling point and boiling range:	> -40 °C	
Flash point:	< -60 °C	
Flammability		
Solid:	not applicable	
Gas:	not applicable	
Explosive properties		
Vapours can form explosive mixtures with air.		
Lower explosion limits:	0,8 vol. %	
Upper explosion limits:	15 vol. %	
Auto-ignition temperature		
Solid:	not applicable	
Gas:	not applicable	
Decomposition temperature:	not determined	
Oxidizing properties		
Not oxidising.		
Vapour pressure: (at 20 °C)	not determined	
Density:	0,68 g/cm³	(calc.)
Water solubility:	partially miscible	
Solubility in other solvents		
not determined		
Partition coefficient:	not determined	
Vapour density:	not determined	
Evaporation rate:	not determined	

9.2. Other information

Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol. Vapours can form explosive mixtures with air.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Reacts with : Oxidising agent, strong; Strong acid; Strong alkali

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

See SECTION 10: Stability and reactivity

10.6. Hazardous decomposition products

See SECTION 5: Firefighting measures

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
141-78-6	ethyl acetate				
	oral	LD50 5620 mg/kg	Rat	GESTIS	
	dermal	LD50 >18000 mg/kg	Rabbit	GESTIS	
	inhalation (4 h) vapour	LC50 1600 mg/l	Rat	GESTIS	
123-86-4	n-butyl acetate				
	oral	LD50 10760 mg/kg	Rat		OECD 423
	dermal	LD50 >14112 mg/kg	Rabbit		OECD 402
	inhalation (4 h) vapour	LC50 23,4 mg/l	Rat		OECD 403
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether				
	oral	LD50 5660 mg/kg	Rat		
	dermal	LD50 4120 mg/kg	Rabbit		
64-17-5	ethanol; ethyl alcohol				
	oral	LD50 6200 mg/kg	Rat	IUCLID	
	dermal	LD50 >2000 mg/kg	Rabbit		OECD 402
	inhalation (4 h) vapour	LC50 95,6 mg/l	Rat	RTECS	
5392-40-5	citral				
	oral	LD50 6800 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		

Irritation and corrosivity

Causes eye irritation.

Sensitising effects

May cause an allergic skin reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

Aspiration hazard

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

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
141-78-6	ethyl acetate					
	Acute fish toxicity	LC50 328 mg/l	96 h	Pimephales promelas (fathead minnow)	GESTIS	
	Acute algae toxicity	ErC50 2500 mg/l			GESTIS	
	Acute crustacea toxicity	EC50 679 mg/l	48 h	Daphnia magna (Big water flea)	GESTIS	
123-86-4	n-butyl acetate					
	Acute fish toxicity	LC50 17-19 mg/l	96 h	Pimephales promelas (fathead minnow)		OECD 203
	Acute algae toxicity	ErC50 647,7 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 44 mg/l	48 h	Daphnia magna (Big water flea)		
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether					
	Acute algae toxicity	ErC50 > 100 mg/l		Scenedesmus sp.		
	Acute crustacea toxicity	EC50 > 100 mg/l	48 h	Daphnia magna		
64-17-5	ethanol; ethyl alcohol					
	Acute fish toxicity	LC50 13000 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		OECD 203
	Acute algae toxicity	ErC50 275 mg/l	72 h	Chlorella vulgaris		OECD 201
	Acute crustacea toxicity	EC50 9268 - 14221 mg/l	48 h	Daphnia magna	IUCLID	
5392-40-5	citral					
	Acute fish toxicity	LC50 6,78 mg/l	96 h	Leuciscus idus (golden orfe)	DIN 38412	
	Acute algae toxicity	ErC50 103,8 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 6,8 mg/l	48 h	Daphnia magna (Big water flea)		

12.2. Persistence and degradability

Biodegradable.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
141-78-6	ethyl acetate			
	OECD 301D	100%	28	
	Readily biodegradable (according to OECD criteria).			
123-86-4	n-butyl acetate			
	OECD 301D	83%	28	
	Readily biodegradable (according to OECD criteria).			
64-17-5	ethanol; ethyl alcohol			
	OECD 301B	97%		
5392-40-5	citral			
	Aerobic biological treatment	85 - 95%	28	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
141-78-6	ethyl acetate	0,73
123-86-4	n-butyl acetate	2,3
112-34-5	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	0,56 (25°C)
64-17-5	ethanol; ethyl alcohol	-0,31
5392-40-5	citral	2,9

BCF

CAS No	Chemical name	BCF	Species	Source
64-17-5	ethanol; ethyl alcohol	0,66 - 3,2		

12.4. Mobility in soil

No 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.

12.6. 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.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. 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. Recommendation: EAK 160504

Waste disposal number of waste from residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS (Petroleum gases, liquefied; Petroleum gas)
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1

Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Transport category:	2
Tunnel restriction code:	D

Inland waterways transport (ADN)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS (Petroleum gases, liquefied; Petroleum gas)
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1

Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0

Marine transport (IMDG)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS (Petroleum gases, liquefied; Petroleum gas)
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1

Special Provisions:	63, 190, 277, 327, 344, 381,959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1950

14.2. UN proper shipping name: AEROSOLS, flammable

14.3. Transport hazard class(es): 2.1

14.4. Packing group: -

Hazard label: 2.1

Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Reference to other sections: 6,7,8

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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: ethanol; ethyl alcohol

Entry 29: Petroleum gases, liquefied; Petroleum gas

Entry 55: 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether

2010/75/EU (VOC):	88 % (0,593 g/l)
Information according to 2012/18/EU (SEVESO III):	P3a FLAMMABLE AEROSOLS

Additional information

Aerosol directive (75/324/EEC)

National regulatory information

Employment restrictions:	Observe restrictions to employment for juvenils 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 contaminating class (D):	1 - slightly water contaminating
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not 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).
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).
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 Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Aerosol 1; H222-H229	
Skin Irrit. 2; H315	
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H336	

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singulary 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 hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)