Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code: **411 00 21500-6458**
Product name **FUEL POWER OPTIMIZER**
UFI : **N9E2-J17X-K40P-A1EC**

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

Intended use **Fuel optimizer for bi-fuel engines**

1.3. Details of the supplier of the safety data sheet

Name **Meccanocar Italia S.r.l.**
Full address **Via San Francesco, 22**
District and Country **56033 Capannoli (PI)**
Italy
Tel. +39 0587 609433
Fax +39 0587 607145
e-mail address of the competent person
responsible for the Safety Data Sheet **moreno.meini@meccanocar.it**
Supplier:

1.4. Emergency telephone number

For urgent inquiries refer to **National Poisons Information Service: +44 121 507 4123**

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Carcinogenicity, category 2	H351	Suspected of causing cancer.
Acute toxicity, category 4	H332	Harmful if inhaled.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Warning

Hazard statements:

H351	Suspected of causing cancer.
H332	Harmful if inhaled.
H319	Causes serious eye irritation.
H315	Causes skin irritation.

Precautionary statements:

P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P261	Avoid breathing vapours.
P201	Obtain special instructions before use.
P264	Wash hands thoroughly after handling.
P202	Do not handle until all safety precautions have been read and understood.
P308+P313	IF exposed or concerned: Get medical advice / attention.

Contains: 2-ETILESANOLO
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration >= 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	**x = Conc. %**	**Classification (EC) 1272/2008 (CLP)**
2-ETILESANOLO		
CAS 104-76-7	78 ≤ x < 82	Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335
EC 203-234-3		STA Inhalation vapours: 11 mg/l, STA Inhalation mists/powders: 1,5 mg/l, STA Inhalation gas: 4500 ppm
INDEX -		
REACH Reg. 01-2119487289-20-XXXX		
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM		
CAS 64742-94-5	2,5 ≤ x < 3	Asp. Tox. 1 H304, EUH066
EC 265-198-5		

INDEX 649-424-00-3		
REACH Reg. 01-2119463588-24-XXXX		
1,2-BIS (2-ETHYLESYLOXY CARBONIL) POTASSIUM ETHANSULPHONATE		
CAS 7491-09-0	2,5 ≤ x < 3	Eye Dam. 1 H318, Skin Irrit. 2 H315
EC 231-308-5		
INDEX -		
1,2,4-TRIMETHYLBENZENE		
CAS 95-63-6	0,9 ≤ x < 1	Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 2 H411
EC 202-436-9		STA Inhalation vapours: 11 mg/l, STA Inhalation mists/powders: 1,5 mg/l, STA Inhalation gas: 4500 ppm
INDEX 601-043-00-3		
REACH Reg. 01-2119472135-42-XXXX		
NAPHTHALENE		
CAS 91-20-3	0,2 ≤ x < 0,25	Carc. 2 H351, Acute Tox. 4 H302, Aquatic Chronic 1 H410 M=1
EC 202-049-5		STA Oral: 500 mg/kg
INDEX 601-052-00-2		
REACH Reg. 01-2119561346-37-XXXX		
CUMENE		
CAS 98-82-8	0 ≤ x < 0,05	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, Aquatic Chronic 2 H411, Classification note according to Annex VI to the CLP Regulation: C
EC 202-704-5		
INDEX 601-024-00-X		
MESITYLENE		
CAS 108-67-8	0 ≤ x < 0,05	Flam. Liq. 3 H226, STOT SE 3 H335, Aquatic Chronic 2 H411
EC 203-604-4		STOT SE 3 H335: ≥ 25%
INDEX 601-025-00-5		
REACH Reg. 01-2119463878-19-XXXX		
XYLENE (MIXTURE OF ISOMERS)		
CAS 1330-20-7	0 ≤ x < 0,05	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Irrit. 2 H315, Classification note according to Annex VI to the CLP Regulation: C
EC 215-535-7		STA Dermal: 1100 mg/kg, STA Inhalation vapours: 11 mg/l, STA Inhalation mists/powders: 1,5 mg/l, STA Inhalation gas: 4500 ppm
INDEX 601-022-00-9		
REACH Reg. 01-2119488216-32-XXXX		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again.
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Send away individuals who are not suitably equipped. Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Use breathing equipment if powders are released into the air.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water. Avoid the formation of powder and dispersion of the product in the air.

6.3. Methods and material for containment and cleaning up

Collect the leaked product and place it in containers for recovery or disposal. Make sure the leakage site is well aired. It may be advisable to wash with water any surfaces contaminated with traces of dust, without contaminating waste water.

6.4. Reference to other sections

Notify the competent authorities if the product has reached waterways or if it has contaminated the ground or vegetation.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2020

2-ETILESANOLO

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,017	mg/l
Normal value in marine water	0,002	mg/l
Normal value for fresh water sediment	0,284	mg/kg
Normal value for marine water sediment	0,028	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	55	mg/kg
Normal value for the terrestrial compartment	0,047	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,1 mg/kg bw/d				
Inhalation	26,6 mg/m3		26,6 mg/m3	2,3 mg/m3	53,2 mg/m3		53,2 mg/m3	12,8 mg/m3

Skin				11,4 mg/kg bw/d				23 mg/kg bw/d

1,2-BIS (2-ETHYLESYLOXY CARBONIL) POTASSIUM ETHANSULPHONATE

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,007	mg/l
Normal value in marine water	0,001	mg/l
Normal value for fresh water sediment	0,525	mg/kg
Normal value for marine water sediment	0,052	mg/kg
Normal value of STP microorganisms	122	mg/l
Normal value for the terrestrial compartment	0,101	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				5 mg/kg bw/d				
Inhalation				14,8 mg/m3				98,7 mg/m3
Skin				5 mg/kg bw/d				10 mg/kg bw/d

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				19 mg/kg bw/d				

1,2,4-TRIMETHYLBENZENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	100	20			
VLEP	FRA	100	20	250	50	
VLEP	ITA	100	20			
TLV	NOR	100	20			
VLE	PRT	100	20			
OEL	EU	100	20			
TLV-ACGIH		123	25			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,12	mg/l
Normal value in marine water	0,12	mg/l
Normal value for fresh water sediment	13,56	mg/kg
Normal value for marine water sediment	13,56	mg/kg
Normal value of STP microorganisms	2,41	mg/l
Normal value for the terrestrial compartment	2,34	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic

Oral				15 mg/kg bw/d				
Inhalation	29,4 mg/m3	29,4 mg/m3	29,4 mg/m3	29,4 mg/m3	100 mg/m3	100 mg/m3	100 mg/m3	100 mg/m3
Skin				9512 mg/kg bw/d				16171 mg/kg bw/d

NAPHTHALENE

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,24	mg/l
Normal value in marine water	0,24	mg/l
Normal value for fresh water sediment	6,72	mg/kg
Normal value for marine water sediment	6,72	mg/kg
Normal value of STP microorganisms	2,9	mg/l
Normal value for the terrestrial compartment	5,33	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation							25 mg/m3	25 mg/m3
Skin								3,57 mg/kg bw/d

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
VLEP	ITA	221	50	442	100	SKIN
TLV	NOR	108	25			SKIN
VLE	PRT	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for marine water sediment	12,46	mg/kg
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				12,5 mg/kg bw/d				
Inhalation	260 mg/m3	260 mg/m3	65,3 mg/m3	65,3 mg/m3	442 mg/m3	442 mg/m3	221 mg/m3	221 mg/m3
Skin				125 mg/kg bw/d				212 mg/kg bw/d

MESITYLENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	100	20			
VLEP	FRA	100	20	250	50	
VLEP	ITA	100	20			
TLV	NOR	100	20			
VLE	PRT	100	20			
OEL	EU	100	20			
TLV-ACGIH		123	25			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,101	mg/l
Normal value in marine water	0,101	mg/l
Normal value for fresh water sediment	7,86	mg/kg
Normal value for marine water sediment	7,86	mg/kg
Normal value of STP microorganisms	2,02	mg/l
Normal value for the terrestrial compartment	1,34	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				15 mg/kg bw/d				
Inhalation	29,4 mg/m3	29,4 mg/m3	29,4 mg/m3	29,4 mg/m3	100 mg/m3	100 mg/m3	100 mg/m3	100 mg/m3
Skin				9512 mg/kg bw/d				16171 mg/kg bw/d

CUMENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	100	20	250	50	SKIN
TLV	NOR	100	20	250	50	SKIN
VLE	PRT	50	10	250	50	INHAL
VLE	PRT	50	10	250	50	SKIN
WEL	GBR	125	25	250	50	SKIN
OEL	EU	50	10	250	50	SKIN

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired

through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

2-ETILESANOLO

Occhiali di sicurezza ben aderenti. Oltre agli occhiali, indossare una visiera se esiste una ragionevole possibilità di schizzi sul viso.
L'apparecchiatura deve essere conforme alla norma EN 166.
Protezione mani: materiale adatto gomma nitrilica
Valutazione secondo EN 374: livello 6
Spessore del guanto circa 0,55 mm
Tempo di permeazione> 480 min
Spessore del guanto circa 0,8 mm
Protezione per la respirazione: respiratore con filtro A. Maschera completa con filtro sopra menzionato secondo i produttori che utilizzano requisiti o autorespiratore. Le apparecchiature devono essere conformi a EN 136 o EN 140 e EN 143.

1,2-BIS (2-ETHYLESYLOXY CARBONIL) POTASSIUM ETHANSULPHONATE

Engineering Controls: Make sure eyewash stations and safety showers are close to the workstation. Effective exhaust ventilation system.
Personal protective equipment
Respiratory protection: In case of vapor formation use an approved filter respirator.
Gas cartridge A (organic substances, brown).
Hand protection: Glove material: Neoprene. Nitrile rubber
Eye protection: Eye wash bottle with pure water. Tightly fitting safety glasses
Skin and body protection: Protective suit. Choose body protection based on quantity e
concentration of the dangerous substance in the workplace.
Hygiene measures: Handle in accordance with good industrial hygiene and safety practices.
Do not eat or drink during use. Do not smoke during use. Wash your hands before breaks and at the end of the work day.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	colourless	
Odour	characteristic, pungent	
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Flammability	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	77 °C	
Auto-ignition temperature	Not available	
pH	Not available	
Kinematic viscosity	Not available	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density	0,837	
Relative vapour density	Not available	
Particle characteristics	Not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

May form flammable mixtures with: air.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

2-ETILESANOLO

Stable under recommended storage conditions.

MESITYLENE

No decomposition if used and stored according to specifications.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage.Reacts violently with: strong oxidants,strong acids,nitric acid,perchlorates.May form explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating.

2-ETILESANOLO

Evitare il contatto con calore, scintille, fiamme libere e scariche statiche. Evitare qualsiasi fonte di ignizione.

MESITYLENE

Calore, fiamme e scintille.

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

2-ETILESANOLO

Agenti ossidanti.

MESITYLENE

Agenti ossidanti.

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

XYLENE (MIXTURE OF ISOMERS)
WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

XYLENE (MIXTURE OF ISOMERS)
Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

Interactive effects

XYLENE (MIXTURE OF ISOMERS)
Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	1,90 mg/l
ATE (Inhalation - vapours) of the mixture:	13,92 mg/l
ATE (Inhalation - gas) of the mixture:	5696,2 mg/l
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

2-ETILESANOLO

LD50 (Oral):	2047 mg/kg Rat
LD50 (Dermal):	> 3000 mg/kg Rat

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM

LD50 (Oral):	> 5000 mg/kg Rat

LD50 (Dermal):	> 2000 mg/kg Rabbit
LC50 (Inhalation vapours):	> 5,28 mg/l/4h Rat

1,2,4-TRIMETHYLBENZENE

STA (Inhalation mists/powders):	1,5 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation gas):	4500 ppm estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

NAPHTHALENE

STA (Oral):	500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

XYLENE (MIXTURE OF ISOMERS)

STA (Dermal):	1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation mists/powders):	1,5 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
STA (Inhalation gas):	4500 ppm estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

MESITYLENE

LD50 (Oral):	6000 mg/kg Rat
LD50 (Dermal):	> 2000 mg/kg Rat

CUMENE

LD50 (Oral):	1400 mg/kg Rat
LD50 (Dermal):	> 3160 mg/kg Rabbit
LC50 (Inhalation vapours):	> 17,6 mg/l/6h Rat

2-ETILESANOLO
Metodo: Equivalente o similare a OECD 401
Affidabilità: 2
Specie: Ratto (Wistar; maschio)
Via d'esposizione: Orale
Risultati: LD50: ca. 2047 mg/kg bw
Metodo: Equivalente o similare a OECD 403
Affidabilità: 2
Specie: Ratto (Sprague-Dawley; maschio/femmina)
Via d'esposizione: Inalazione (vapore+aerosol)
Risultati: LC50: > 0.89 - <= 5.3 mg/L air
Metodo: OECD 402
Affidabilità: 1
Specie: Ratto (WISW (SPF TNO); maschio/femmina)
Via d'esposizione: Cutanea
Risultati: non classificato

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM
Method: EPA OTS 798.1175
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: LD50:> 5 000 mg / kg bw
Method: Equivalent or similar to OECD 403
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapor)
Results: LC50:> 5.28 mg / L air
Method: EPA OTS 798.1100
Reliability: 1
Species: Rabbit (New Zealand White; male / female)
Route of exposure: Dermal
Results: LD50:> 2 000 mg / kg bw

1,2,4-TRIMETHYLBENZENE
Method: Equivalent or similar to EU Method B.1
Reliability: 1
Species: Rat (male)
Route of exposure: Oral
Results: LD50: 6 000 mg / kg bw
Method: Not indicated
Reliability: 2
Species: Rat (CD (COBS); male / female)
Route of exposure: Inhalation
Results: LC50: 10 200 mg / m³ air
Bibliographic reference:
Method: Not indicated
Reliability: 2
Species: Rat (CD (COBS); male / female)
Route of exposure: Dermal
Results: LD50: 4 other: mL / kg bw (3440 mg / kg)

NAPHTHALENE
Method: OECD 401
Reliability: 2
Species: Mouse (CD-1 ICR; male / female)
Route of exposure: Oral
Results: LD50: 533 mg / kg bw
Bibliographic reference: Shopp GM, White KL, Holsapple MP, Barnes DW, et al., Naphthalene Toxicity in CD-l Mice: General Toxicology and lmmunotoxicology (1984)
Method: Equivalent or similar to OECD 403
Reliability: 1
Species: Rat (Wistar; male / female)
Route of exposure: Inhalation (vapor)
Results: LC50:> 0.4 mg / L air (analytical)
Method: Equivalent or similar to OECD 403
Reliability: 2
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Dermal
Results: LD50:> 16 000 mg / kg bw

XYLENE (MIXTURE OF ISOMERS)
Method: Equivalent or similar to EU Method B.1
Reliability: 1
Species: Rat (F344 / N; male / female)
Route of exposure: Oral
Results: LD50 = 3523 mg / kg bw
Method: Equivalent or similar to EU Method B.2

Reliability: 2
Species: Rat (male)
Route of exposure: Inhalation (vapors)
Results: LD50 = 6700 ppm

MESITYLENE
Metodo: Equivalente o similare a EU Method B.1
Affidabilità: 1
Specie: Ratto (maschio)
Via d'esposizione: Orale
Risultati: LD50: 6 000 mg/kg bw
Metodo: Non indicato
Affidabilità: 2
Specie: Ratto (CD (COBS); maschio/femmina)
Via d'esposizione: Inalazione
Risultati: LC50: 10 200 mg/m³ air
Metodo: Non indicato
Affidabilità: 2
Specie: Ratto (CD (COBS); maschio/femmina)
Via d'esposizione: Cutanea
Risultati: LD50: > 4 mL/kg bw

SKIN CORROSION / IRRITATION

Causes skin irritation

2-ETILESANOLO
Metodo: OECD 404
Affidabilità: 1
Specie: Coniglio (Small Russian)
Via d'esposizione: Cutanea
Risultati: Altamente irritante

1,2-BIS (2-ETHYLESYLOXY CARBONIL) POTASSIUM ETHANSULPHONATE
Method: OECD Guideline 404
Reliability: 2
Species: rabbit
Route of exposure: cutaneous
Results: irritant category 2

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM
Method: EPA Guidelines in FR Vol. 44, No. 145, pgs. 44054-44093
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Dermal
Results: Irritating

1,2,4-TRIMETHYLBENZENE
Method: Equivalent or similar to EU Method B.4
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Dermal
Results: Irritating

Bibliographic reference: Jacobs G and Martens M, Evaluation of the test method for skin irritation as prescribed by OECD and EEC (1987)

NAPHTHALENE
Method: Consumer Product Safety Commision, USA; Code of Federal Regulation, Title 16, Section 1500.41
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Dermal
Results: Not irritating

MESITYLENE
Metodo: Equivalente o similare a EU Method B.4
Affidabilità: 2
Specie: Coniglio (New Zealand White)
Via d'esposizione: Cutanea
Risultati: Categoria 2, irritante
Riferimento bibliografico: Jacobs G;Martens M; Evaluation of the test method for skin irritation as prescribed by oecd and eec (1987)

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

2-ETILESANOLO
Metodo: OECD 405
Affidabilità: 1
Specie: Coniglio (Small Russian)
Via d'esposizione: Oculare
Risultati: Categoria 2, irritante per gli occhi

1,2-BIS (2-ETHYLESYLOXY CARBONIL) POTASSIUM ETHANSULPHONATE
Method: OECD Guideline 405
Reliability: 2
Species: rabbit
Route of exposure: ocular
Results: Category 1 (irreversible effects on the eye)

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM
Method: EPA OTS 798.4500
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Not irritating

1,2,4-TRIMETHYLBENZENE
Method: Equivalent or similar to OECD 405
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Not irritating

NAPHTHALENE
Method: Consumer Product Safety Commision, USA; Code of Federal Regulation, Title 16, Section 1500.41
Reliability: 2
Species: Rabbit (albino rabbit)
Route of exposure: Ocular
Results: Not irritating

MESITYLENE
Metodo: Equivalente o similare a OECD 405
Affidabilità: 2
Specie: Coniglio (New Zealand White)
Via d'esposizione: Oculare
Risultati: Non irritante

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM
Method: Equivalent or similar to OECD 406-read across
Reliability: 1
Species: guinea pig (Hartley; male)
Route of exposure: Dermal
Results: Not sensitizing

1,2,4-TRIMETHYLBENZENE
Method: Equivalent or similar to OECD 406
Reliability: 2
Species: guinea pig (P 'strain; male / female)
Route of exposure: Dermal
Results: Not sensitizing

NAPHTHALENE
Method: OECD 406
Reliability: 2
Species: guinea pig (Hartley; male)
Route of exposure: Dermal
Results: Not sensitizing

MESITYLENE
Metodo: OECD 406
Affidabilità: 2
Specie: Porcellino d`india (P' strain; maschio/femmina)
Via d'esposizione: Cutanea
Risultati: Negativo

Respiratory sensitization

Information not available

Skin sensitization

1,2-BIS (2-ETHYLESYLOXY CARBONIL) POTASSIUM ETHANSULPHONATE
Method: Modified Draize-Shelanski Repeat Insult Patch Test
Reliability: 2
Human species
Route of exposure: cutaneous
Results: not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

2-ETILESANOLO
Metodo: OECD 471-test in vitro
Affidabilità: 1
Specie: S. typhimurioum, E.coli
Risultati: Negativo con e senza attivazione metabolica
Metodo: Equivalente o similare a OECD 474-test in vivo
Affidabilità: 2
Specie: Topo (B6C3F1; maschio/femmina)
Via d'esposizione: Cutanea
Risultati: Negativo

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM
Method: Equivalent or similar to OECD 479 in vitro test
Reliability: 1
Species: Chinese hamster ovary
Results: Negative
Method: Equivalent or similar to OECD 479 in vivo test
Reliability: 1
Species: Mouse (B6C3F1; male / female)
Route of exposure: Oral
Results: Positive in males, negative in females

1,2,4-TRIMETHYLBENZENE
Method: Equivalent or similar to OECD 471 in vitro test
Reliability: 2
Species: TA97a, TA98, TA100, TA102
Results: Negative with and without metabolic activation
Method: Equivalent or similar to OECD 474 in vivo test
Reliability: 2
Species: Mouse (Balb / c; male / female)
Route of exposure: Oral
Results: Negative

NAPHTHALENE
Method: Equivalent or similar to OECD 471 in vitro test
Reliability: 2
Species: S. typhimurium

Results: Negative
Method: EPA OPP 84-2-test in vivo
Reliability: 1
Species: Mouse (CD-1; male / female)
Route of exposure: Oral
Results: Negative

XYLENE (MIXTURE OF ISOMERS)
Method: Equivalent or similar to EU Method B.10-in vitro test
Reliability: 2
Species: Chinese hamster
Results: Negative with and without metabolic activation
Method: Equivalent or similar to OECD 478
Reliability: 2
Species: Mouse (Swiss Webster; male / female)
Route of exposure: Dermal
Results: Negative

MESITYLENE
Metodo: Equivalente o similare a OECD 471-test in vitro
Affidabilità: 2
Specie: TA97a, TA98, TA100, TA102
Risultati: Negativo con e senza attivazione metabolica
Metodo: Equivalente o similare a OECD 474-test in vivo
Affidabilità: 2
Specie: Topo (Balb/c; maschio/femmina)
Via d'esposizione: Orale
Risultati: Negativo

CARCINOGENICITY

Suspected of causing cancer

2-ETILESANOLO
Metodo: Equivalente o similare a OECD 451
Affidabilità: 1
Specie: Ratto (Fischer 344; maschio/femmina)
Via d'esposizione: Orale
Risultati: Negativo

NAPHTHALENE
Method: Not indicated
Reliability: 1
Species: Rat (Fischer 344; male / female)
Route of exposure: Inhalation (vapor)
Results: Negative

XYLENE (MIXTURE OF ISOMERS)
Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

MESITYLENE
Metodo: Equivalente o similare a OECD 416
Affidabilità: 1
Specie: Ratto (Charles River COBS CD; maschio/femmina)
Via d'esposizione: Inalazione (vapore)
Risultati: ca. 500 ppm

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

2-ETILESANOLO
Metodo: OECD 416
Affidabilità: 2
Specie: Ratto (Sprague-Dawley; maschio/femmina)
Via d'esposizione: Orale
Risultati: Negativo. NOAEL=3000 ppm

1,2,4-TRIMETHYLBENZENE
Method: Equivalent or similar to OECD 416
Reliability: 1
Species: Rat (Charles River COBS CD; male / female)
Route of exposure: Inhalation (vapor)
Results: NOAEC = 500 ppm

NAPHTHALENE
Method: Equivalent or similar to OECD 413
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapor)
Results: Negative

MESITYLENE
Metodo: Equivalente o similare a OECD 416
Affidabilità: 1
Specie: Ratto (Charles River COBS CD; maschio/femmina)
Via d'esposizione: Inalazione (vapore)
Risultati: ca. 500 ppm

Adverse effects on sexual function and fertility

XYLENE (MIXTURE OF ISOMERS)
Method: Not indicated
Reliability: 2
Species: Rat (Crl-CD® (SC) BR; male / female)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEC (fertility) = 500 ppm

Adverse effects on development of the offspring

XYLENE (MIXTURE OF ISOMERS)
Method: Equivalent or similar to OECD 414
Reliability: 2
Species: Rat (Sprague-Dawley)
Route of exposure: Inhalation (vapors)
Results: Negative (development)

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

2-ETILESANOLO
Sulla base dei dati disponibili e a mezzo del giudizio di esperti, la sostanza è classificata nella classe di tossicità per organi bersagio per esposizione singola.

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

1,2,4-TRIMETHYLBENZENE
Based on the available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

NAPHTHALENE
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

XYLENE (MIXTURE OF ISOMERS)
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

MESITYLENE
Sulla base dei dati disponibili e a mezzo del giudizio di esperti, la sostanza è classificata nella classe di tossicità per organi bersagio per esposizione singola.

Target organ

2-ETILESANOLO
Tratto respiratorio

1,2,4-TRIMETHYLBENZENE
Respiratory tract

MESITYLENE
Tratto respiratorio

Route of exposure

2-ETILESANOLO
Inalazione

1,2,4-TRIMETHYLBENZENE
Inhalation

MESITYLENE
Inalazione

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

2-ETILESANOLO
Sulla base dei dati disponibili e a mezzo del giudizio di esperti, la sostanza non è classificata nella classe di tossicità per organi bersaglio a esposizione ripetuta.

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for repeated exposure.

1,2,4-TRIMETHYLBENZENE
Method: OECD 408-Read across
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: NOAEL = 600 mg / kg bw / day
Method: Equivalent or similar to OECD 452
Reliability: 1
Species: Rat (Wistar; male / female)
Route of exposure: Inhalation (vapors)
Results: NOAEC = 1800 mg / m3 air

NAPHTHALENE
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for prolonged or repeated exposure.

XYLENE (MIXTURE OF ISOMERS)
Method: Equivalent or similar to OECD 408
Reliability: 2
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: Negative

MESITYLENE
Sulla base dei dati disponibili e a mezzo del giudizio di esperti, la sostanza non è classificata nella classe di tossicità per organi bersaglio per esposizione prolungata o ripetuta.

Target organ

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

12.1. Toxicity

MESITYLENE	
LC50 - for Fish	12,52 mg/l/96h Carassius auratus
EC50 - for Crustacea	6 mg/l/48h Daphnia magna
2-ETILESANOLO	
LC50 - for Fish	17,1 mg/l/96h
EC50 - for Crustacea	39 mg/l/48h
EC50 - for Algae / Aquatic Plants	16,6 mg/l/72h

EC10 for Algae / Aquatic Plants	5,3 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	5,3 mg/l

NAPHTHALENE

EC50 - for Crustacea	2,16 mg/l/48h
EC10 for Algae / Aquatic Plants	16 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	16 mg/l

1,2-BIS (2-ETHYLESYLOXY CARBONIL) POTASSIUM ETHANSULPHONATE

LC50 - for Fish	49 mg/l/96h
EC50 - for Crustacea	6,6 mg/l/48h
EC50 - for Algae / Aquatic Plants	82,5 mg/l/72h
EC10 for Algae / Aquatic Plants	22 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	22 mg/l

12.2. Persistence and degradability

2-ETILESANOLO
Rapidamente degradabile, 96% in 9 giorni (OECD TG 301 C)
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM
Oil distillates, coal, plant extracts: they are blends of parafin hydrocarbons, naphthenes, diterpenes and aromatics. Their behaviour in the environment depends on their composition. In any case they should be used according to good working practice, avoiding discharging it into the environment.
NAPHTHALENE
Intrinsically biodegradable, 2% in 4 weeks.
XYLENE (MIXTURE OF ISOMERS)
Rapidly degradable in water, 98% in 28 days
MESITYLENE
Rapidamente degradabile, 61% in 28 giorni (Dr Noack 2016)

MESITYLENE

Solubility in water	0,1 - 100 mg/l

NOT rapidly degradable

1,2,4-TRIMETHYLBENZENE

Solubility in water	0,1 - 100 mg/l

Rapidly degradable

XYLENE (MIXTURE OF ISOMERS)

Solubility in water	100 - 1000 mg/l

Rapidly degradable

SOLVENT NAPHTHA (PETROLEUM), HEAVY AROM
Rapidly degradable

CUMENE

Solubility in water	0,1 - 100 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

MESITYLENE	
Partition coefficient: n-octanol/water	3,42
1,2,4-TRIMETHYLBENZENE	
Partition coefficient: n-octanol/water	3,65
BCF	243
XYLENE (MIXTURE OF ISOMERS)	
Partition coefficient: n-octanol/water	3,12
BCF	25,9
CUMENE	
Partition coefficient: n-octanol/water	3,55
BCF	94,69

12.4. Mobility in soil

MESITYLENE	
Partition coefficient: soil/water	2,87
1,2,4-TRIMETHYLBENZENE	
Partition coefficient: soil/water	3,04
XYLENE (MIXTURE OF ISOMERS)	
Partition coefficient: soil/water	2,73
CUMENE	
Partition coefficient: soil/water	2,946

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
Waste transportation may be subject to ADR restrictions.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

2-ETILESANOLO
Informazioni sul prodotto: smaltimento richiesto in conformità con tutte le normative statali e locali relative alla gestione dei rifiuti. La scelta del il metodo di smaltimento appropriato dipende dalla composizione del prodotto in base al tempo di smaltimento e dal locale statuto e possibilità di smaltimento.
Rifiuti pericolosi secondo il Catalogo europeo dei rifiuti (CAE)

1,2-BIS (2-ETHYLESYLOXY CARBONIL) POTASSIUM ETHANSULPHONATE
Product: Do not dispose of waste in sewers. Do not contaminate ponds, waterways or ditches with chemical or used container. Hazardous waste
Contaminated packaging: Empty the remaining contents. Dispose of as unused product. Do not reuse empty containers.

NAPHTHALENE
It must comply with local authorities and national legislation. Dispose of as toxic and dangerous waste (Directive 78/319 / EC).
They must not be disposed of with household waste or strong oxidizing agents. Do not allow the product to reach the sewage system.

MESITYLENE
Deve essere trattato in modo speciale nel rispetto delle normative ufficiali.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 3295

14.2. UN proper shipping name

ADR / RID:	HYDROCARBONS, LIQUID, N.O.S.
IMDG:	HYDROCARBONS, LIQUID, N.O.S.
IATA:	HYDROCARBONS, LIQUID, N.O.S.

14.3. Transport hazard class(es)

ADR / RID:	Class: 3	Label: 3
IMDG:	Class: 3	Label: 3
IATA:	Class: 3	Label: 3

14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID:	NO
IMDG:	NO
IATA:	NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
	Special provision: -		
IMDG:	EMS: F-E, S-D	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special provision:	A3, A324	

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point	3 - 40

Contained substance

Point	75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3
Carc. 2	Carcinogenicity, category 2
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
H226	Flammable liquid and vapour.
H351	Suspected of causing cancer.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.
CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.