

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 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

Product name **PLDL**
 UFI : **EXW0-H027-F002-KRF7**

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

Intended use **Diluent**

1.3. Details of the supplier of the safety data sheet

Name **COMEC ITALIA SRL**
 Full address **Piazzale del lavoro 149**
 District and Country **21044 Cavaria (VA)**
ITALIA
Tel. +39 0331 219516
Fax +39 0331 216161
 e-mail address of the competent person **info@comec-italia.it**
 responsible for the Safety Data Sheet **Edgardo Baggini**

1.4. Emergency telephone number

For urgent inquiries refer to **CAV 24 h / 24 h:**

Centro Antiveleni di Pavia: 0382 24444 (CAV Centro Nazionale di informazione tossicologica-Pavia)
Centro Antiveleni di Milano: 02 66101029 (CAV Ospedale Niguarda Ca' Granda - Milano)
Centro Antiveleni di Bergamo: 800 883300 (CAV Azienda Ospedaliera Papa Giovanni XXIII - Bergamo)
Centro Antiveleni di Firenze: 055 7947819 (CAV Ospedale Careggi - Firenze)
Centro Antiveleni di Roma: 06 3054343 (CAV Policlinico Gemelli - Roma)
Centro Antiveleni di Roma: 06 49978000 (CAV Policlinico Umberto I - Roma)
Centro Antiveleni di Roma: 06 68593726 (CAV Osp. Pediatrico Bambino Gesù - Roma)
Centro Antiveleni di Foggia: 800183459 (CAV Azienda Ospedaliero Universitaria di Foggia)
Centro Antiveleni di Napoli: 081 5453333 (CAV Azienda Ospedaliero A. Cardarelli - Napoli)
Centro Antiveleni di Verona: 800 011858 (CAV Azienda Ospedaliera Integrata - Verona)

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:

Flammable liquid, category 2	H225	Highly flammable liquid and vapour.
Eye irritation, category 2	H319	Causes serious eye irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.

SECTION 2. Hazards identification ... / >>

2.2. Label elements

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

Hazard pictograms:



Signal words: Danger

Hazard statements:

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

P501 Dispose of contents / container to . . .
P102 Keep out of reach of children.
P101 If medical advice is needed, have product container or label at hand.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves/ protective clothing / eye protection / face protection.
P271 Use only outdoors or in a well-ventilated area.

Contains: METHYL ACETATE
ACETONE
PROPAN-2-OL
DIISOPROPYLETHER

2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
METHYL ACETATE		
INDEX	607-021-00-X	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC	201-185-2	
CAS	79-20-9	
REACH Reg.	01-2119459211-47-XXXX	
ACETONE		
INDEX	606-001-00-8	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC	200-662-2	
CAS	67-64-1	
REACH Reg.	01-2119471330-49-XXXX	
PROPAN-2-OL		
INDEX	10 \leq x < 15	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
EC	200-661-7	
CAS	67-63-0	
REACH Reg.	01-2119457558-25-XXXX	

SECTION 3. Composition/information on ingredients ... / >>

XYLENE (MIXTURE OF ISOMERS)

INDEX 601-022-00-9 $5 \leq x < 7,5$

**Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412
LD50 Dermal: 2000 mg/kg, STA Inhalation vapours: 11 mg/l**

EC 215-535-7

CAS 1330-20-7

ETHYLBENZENE

INDEX 601-023-00-4 $1,5 \leq x < 2,5$

**Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Aquatic Chronic 3 H412
LC50 Inhalation vapours: 17,6 mg/l/4h**

EC 202-849-4

CAS 100-41-4

METHYL FORMATE

INDEX 607-014-00-1 $1,5 \leq x < 2,5$

Flam. Liq. 1 H224, Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335

EC 203-481-7

CAS 107-31-3

REACH Reg. 01-2119487303-38-XXXX

DIISOPROPYLETHER

INDEX 603-045-00-X $1,5 \leq x < 2,5$

Flam. Liq. 2 H225, STOT SE 3 H336, EUH019, EUH066

EC 203-560-6

CAS 108-20-3

REACH Reg. 01-2119548382-38-XXXX

METHANOL

INDEX 603-001-00-X $1 \leq x < 1,5$

**Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370
STOT SE 2 H371: $\geq 3\%$
STA Oral: 100 mg/kg, STA Dermal: 300 mg/kg, STA Inhalation vapours: 3 mg/l**

EC 200-659-6

CAS 67-56-1

REACH Reg. 01-2119433307-44-XXXX

2-METHYLPENTANE-2,4-DIOL

INDEX 603-053-00-3 $0,3 \leq x < 0,55$

Repr. 2 H361d, Eye Irrit. 2 H319, Skin Irrit. 2 H315

EC 203-489-0

CAS 107-41-5

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

Xylene and Ethylbenzene constitute a multicomponent substance (Reaction mass of ethylbenzene and xylene) identified as follows pursuant to reg. REACH:

REACH N.: 01-2119488216-32-XXXX CE: 905-588-0

REACH N.: 01-2119488216-32-XXXX CE: 905-562-9

REACH N.: 01-2119555267-33-XXXX CE: 905-562-9

REACH N.: 01-2119486136-34-XXXX CE: 905-588-0

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. Get medical advice/attention 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**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. 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**

Block the leakage if there is no hazard.

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. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

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. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation 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. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well

SECTION 7. Handling and storage ... / >>

ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

AUS	Österreich	Gesamte Rechtsvorschrift für Grenzwerteverordnung 2021 , Fassung vom 17.06.2021
BEL	Belgique	Liste de valeurs limites d'exposition aux agents chimiques, livre VI du code du bien-être au travail
BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
CHE	Suisse / Schweiz	Valeurs limites d'exposition aux postes de travail: VME/VLE (SUVA). Grenzwerte am Arbeitsplatz: MAK (SUVA)
CZE	Česká Republika	Nariadení vlády č. 41/2020 Sb. Nariadení vlády, kterým se mění nariadení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
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
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÄRDSMINISTERIETS PUBLIKATIONER 2020:25
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α' 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία"»
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
IRL	Éire	2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)
LTU	Lietuva	Jsakymas dėl lietuvos higienos normos hn 23:2011 „cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai“ patvirtinimo
LVA	Latvija	Grozījumi Ministru kabineta 2007. gada 15. maija noteikumos Nr. 325 "Darba aizsardzības prasības saskarē ar ķīmiskajām vielām darba vietās" (prot. Nr. 32 18. §; prot. Nr. 1 22. §)
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
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
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
SWE	Sverige	Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších predpisov
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
TUR	Türkiye	Kimyasal Maddelerin Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik 12.08.2013 / 28733
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; 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 2022

PLDL

SECTION 8. Exposure controls/personal protection ... / >>

METHYL FORMATE

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Effects on workers					
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			2,02 mg/kg/d					
Inhalation			14,29 mg/m3	14,29 mg/m3	240 mg/m3	240 mg/m3	120 mg/m3	120 mg/m3
Skin			2.02 mg/kg bw/d				17,1 mg/kg/d	

DIISOPROPYLETHER

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,19	mg/l
Normal value in marine water	0,019	mg/l
Normal value for fresh water sediment	2,79	mg/kg
Normal value for marine water sediment	0,28	mg/kg
Normal value of STP microorganisms	37	mg/l
Normal value for the terrestrial compartment	0,47	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Effects on workers					
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				43,1 mg/kg bw/d				
Inhalation		302 mg/m3		151 mg/m3		1700 mg/m3		850 mg/m3
Skin				43,1 mg/kg bw/d				121,4 mg/kg bw/d

PLDL

SECTION 8. Exposure controls/personal protection ... / >>

METHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	610	200	1220	400	STEL:5(Mow), Häufigkeit/Sch:8x
VLEP	BEL	615	200	768	250	
MAK	CHE	310	100	1240	400	
VME/VLE	CHE	310	100	1240	400	
TLV	CZE	600	195	800	260	
AGW	DEU	620	200	1240 (C)	400 (C)	
MAK	DEU	310	100	1240	400	
TLV	DNK	455	150			
VLA	ESP	616	200	770	250	
VLEP	FRA	610	200	760	250	SKIN
HTP	FIN	610	200	770	250	
TLV	GRC	610	200	760	250	
GVI/KGVI	HRV	616	200	770	250	
RD	LTU	450	150	900	300	
RV	LVA	100				
TGG	NLD	100				
NDS/NDSch	POL	250		600		
TLV	ROU	200	63	600	188	
NGV/KGV	SWE	450	150	900 (C)	300 (C)	
NPEL	SVK	310	100	770	250	
MV	SVN	610	200	1240	400	
WEL	GBR	616	200	770	250	
TLV-ACGIH		606	200	757	250	

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		203 mg/kg/d		21,5 mg/kg/d				
Inhalation		3777 mg/m3	133 mg/m3	64 mg/m3		3777 mg/m3	602 mg/m3	300 mg/m3
Skin		203 mg/kg/d		21,5 mg/kg/d			VND	43 mg/kg/d

PLDL

SECTION 8. Exposure controls/personal protection ... / >>

ACETONE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	1200	500	4800	2000	Häufigkeit pro Schicht:4x
VLEP	BEL	594	246	1187	492	
TLV	BGR	600		1400		
MAK	CHE	1200	500	2400	1000	
VME/VLE	CHE	1200	500	2400	1000	
TLV	CZE	800	331,2	1500	621	
AGW	DEU	1200	500	2400 (C)	1000 (C)	
MAK	DEU	1200	500	2400	1000	
TLV	DNK	600	250			E
VLA	ESP	1210	500			
VLEP	FRA	1210	500	2420	1000	
HTP	FIN	1200	500	1500	630	
TLV	GRC	1780		3560		
GVI/KGVI	HRV	1210	500			
VLEP	ITA	1210	500			
OELV	IRL	1210	500			
RD	LTU	1210	500	2420	1000	
RV	LVA	1210	500			SKIN
TGG	NLD	1210		2420		
VLE	PRT	1210	500			
NDS/NDSch	POL	600		1800		
TLV	ROU	1210	500			
NGV/KGV	SWE	600	250	1200 (C)	500 (C)	
NPEL	SVK	1210	500			
MV	SVN	1210	500	2420	1000	
ESD	TUR	1210	500			
WEL	GBR	1210	500	3620	1500	
OEL	EU	1210	500			
TLV-ACGIH			250		500	

Predicted no-effect concentration - PNEC

Normal value in fresh water	10,6	mg/l
Normal value in marine water	1,06	mg/l
Normal value for fresh water sediment	30,4	mg/kg/d
Normal value for marine water sediment	3,04	mg/kg/d
Normal value for water, intermittent release	21	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	29,5	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Effects on workers					
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	62 mg/kg bw/d				
Inhalation			VND	200 mg/m3	2420 mg/m3	VND	VND	1210 mg/m3
Skin			VND	62 mg/kg bw/d			VND	186 mg/kg bw/d

PLDL

SECTION 8. Exposure controls/personal protection ... />>

PROPAN-2-OL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	500	200	2000	800	Häufigkeit pro Schicht:4x
VLEP	BEL	500	200	1000	400	
TLV	BGR	980		1225		
MAK	CHE	500	200	1000	400	
VME/VLE	CHE	500	200	1000	400	
TLV	CZE	500	200	1000	400	
AGW	DEU	500	200	1000	400	
MAK	DEU	500	200	1000	400	
TLV	DNK	490	200			
VLA	ESP	500	200	1000	400	
VLEP	FRA			980	400	
HTP	FIN	500	200	620	250	
TLV	GRC	980	400	1225	500	
GVI/KGVI	HRV	999	400	1250	500	
OELV	IRL		200		400	SKIN
RD	LTU	350	150	600	250	
RV	LVA	350		600		
TGG	NLD	650				
NDS/NDSch	POL	900		1200		SKIN
TLV	ROU	200	81	500	203	
NGV/KGV	SWE	350	150	600 (C)	250 (C)	
NPEL	SVK	500	200	1000	400	
MV	SVN	500	200	1000	400	
WEL	GBR	999	400	1250	500	
TLV-ACGIH		492	200	983	400	

Predicted no-effect concentration - PNEC

Normal value in fresh water	140,9	mg/l
Normal value in marine water	140,9	mg/l
Normal value for fresh water sediment	552	mg/kg
Normal value for marine water sediment	552	mg/kg
Normal value for water, intermittent release	140,9	mg/l
Normal value of STP microorganisms	2251	mg/l
Normal value for the food chain (secondary poisoning)	160	mg/kg
Normal value for the terrestrial compartment	28	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	26				
				mg/kg bw/d				
Inhalation			VND	89			VND	500
				mg/m3				mg/m3
Skin			VND	319			VND	888
				mg/kg bw/d				mg/kg bw/d

PLDL

SECTION 8. Exposure controls/personal protection ... / >>

METHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
MAK	AUS	260	200	1040	800	SKIN	Häufigkeit pro Schicht:4x
VLEP	BEL	266	200	333	250	SKIN	
TLV	BGR	260	200			SKIN	
MAK	CHE	260	200	1040	800	SKIN	
VME/VLE	CHE	260	200	1040	800	SKIN	
TLV	CZE	250	187,75	1000	751	SKIN	
AGW	DEU	270	200	1080	800	SKIN	
MAK	DEU	130	100	260	200	SKIN	
TLV	DNK	260	200			SKIN	E
VLA	ESP	266	200			SKIN	
VLEP	FRA	260	200	1300	1000	SKIN	11
HTP	FIN	270	200	330	250	SKIN	
TLV	GRC	260	200	325	250		
GVI/KGVI	HRV	260	200			SKIN	
VLEP	ITA	260	200			SKIN	
OELV	IRL	260	200			SKIN	
RD	LTU	260	200			SKIN	
RV	LVA	260	200			SKIN	
TGG	NLD	133				SKIN	
VLE	PRT	260	200			SKIN	
NDS/NDSch	POL	100		300		SKIN	
TLV	ROU	260	200			SKIN	
NGV/KGV	SWE	250	200	350 (C)	250 (C)	SKIN	
NPEL	SVK	260	200			SKIN	
MV	SVN	260	200	1040	800	SKIN	
ESD	TUR	260	200			SKIN	
WEL	GBR	266	200	333	250	SKIN	
OEL	EU	260	200				
TLV-ACGIH		262	200	328	250	SKIN	

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		4 mg/kg/d		4 mg/kg/d				
Inhalation	26 mg/m3	26 mg/m3	26 mg/m3	26 mg/m3	130 mg/m3	130 mg/m3	130 mg/m3	130 mg/m3
Skin		4 mg/kg/d		4 mg/kg/d		20 mg/kg/d		20 mg/kg/d

PLDL

SECTION 8. Exposure controls/personal protection ... / >>

ETHYLBENZENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
MAK	AUS	440	100	880	200	SKIN	STEL:5(Mow), Häufigkeit/Sch:8x
VLEP	BEL	87	20	551	125	SKIN	
TLV	BGR	435		545		SKIN	
MAK	CHE	220	50	220	50	SKIN	
VME/VLE	CHE	220	50	220	50	SKIN	
TLV	CZE	200	46	500	115	SKIN	
AGW	DEU	88	20	176	40	SKIN	
MAK	DEU	88	20	176	40	SKIN	
TLV	DNK	217	50			SKIN	E
VLA	ESP	441	100	884	200	SKIN	
VLEP	FRA	88,4	20	442	100	SKIN	
HTP	FIN	220	50	880	200	SKIN	
TLV	GRC	435	100	545	125		
GVI/KGVI	HRV	442	100	884	200	SKIN	
VLEP	ITA	442	100	884	200	SKIN	
OELV	IRL	442	100	884	200	SKIN	
RD	LTU	442	100	884	200	SKIN	
RV	LVA	442	100	884	200	SKIN	
TGG	NLD	215		430		SKIN	
VLE	PRT	442	100	884	200	SKIN	
NDS/NDSch	POL	200		400		SKIN	
TLV	ROU	442	100	884	200	SKIN	
NGV/KGV	SWE	220	50	884	200	SKIN	
NPEL	SVK	442	100	884	200	SKIN	
MV	SVN	442	100	884	200	SKIN	
ESD	TUR	442	100	884	200	SKIN	
WEL	GBR	441	100	552	125	SKIN	
OEL	EU	442	100	884	200	SKIN	
TLV-ACGIH			20				URT & eye; ototox.; kidney;

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,1	mg/l
Normal value in marine water	0,01	mg/l
Normal value for fresh water sediment	13,7	mg/kg
Normal value for marine water sediment	1,37	mg/kg
Normal value for water, intermittent release	0,1	mg/l
Normal value of STP microorganisms	9,6	mg/l
Normal value for the terrestrial compartment	2,68	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,6 mg/kg/d				
Inhalation				15 mg/m3	293 mg/m3			77 mg/m3
Skin								180 mg/kg/d

SECTION 8. Exposure controls/personal protection ... / >>

2-METHYLPENTANE-2,4-DIOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	49	10	49 (C)	10 (C)	
VLEP	BEL	123	25			
MAK	CHE	49	10	98	20	
VME/VLE	CHE	49	10	98	20	
MAK	DEU	49	10	98	20	
TLV	DNK			125 (C)	25 (C)	
VLA	ESP			123	25	
VLEP	FRA			125	25	
HTP	FIN	120	25	200	40	
TLV	GRC	125	25	125	25	
GVI/KGVI	HRV	123	25	123	25	SKIN
OELV	IRL			125	25	
RD	LTU			120 (C)	25 (C)	
NDS/NDSch	POL	50		100		INHAL
NGV/KGV	SWE			120	25	
MV	SVN	49	10	49	10	
WEL	GBR	123	25	123	25	
TLV-ACGIH			25		50	
TLV-ACGIH				10		INHAL

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,42	mg/l
Normal value in marine water	0,04	mg/l
Normal value for fresh water sediment	1,79	mg/kg/d
Normal value for marine water sediment	0,17	mg/kg/d
Normal value for water, intermittent release	4,29	mg/l
Normal value of STP microorganisms	20	mg/l
Normal value for the food chain (secondary poisoning)	100	mg/kg
Normal value for the terrestrial compartment	0,11	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1 mg/kg bw/d				
Inhalation	49 mg/m3		25 mg/m3	3,5 mg/m3	98 mg/m3		49 mg/m3	14 mg/m3
Skin	49			1 mg/kg bw/d				2 mg/kg bw/d

SECTION 8. Exposure controls/personal protection ... / >>

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	221	50	442	100	Häufigkeit pro Schicht:4x
VLEP	BEL	221	50	442	100	
TLV	BGR	221	50	442	100	SKIN
TLV	CZE	200	46	400	92	SKIN
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	440	100	880	200	SKIN
TLV	DNK	109	25	218	50	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
HTP	FIN	220	50	440	100	SKIN
TLV	GRC	435	100	650	150	
GVI/KGVI	HRV	221	50	442	100	SKIN
VLEP	ITA	221	50	442	100	SKIN
OELV	IRL	221	50	442	100	SKIN
RD	LTU	221	50	442	100	SKIN
RV	LVA	221	50	442	100	SKIN
TGG	NLD	210		442		SKIN
VLE	PRT	221	50	442	100	SKIN
NDS/NDSch	POL	100		200		SKIN
TLV	ROU	221	50	442	100	SKIN
NGV/KGV	SWE	221	50	442	100	SKIN
NPEL	SVK	221	50	442	100	SKIN
MV	SVN	221	50	442	100	SKIN
ESD	TUR	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH			20			eye & URT irr.; hemat.; ototox

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 for water, intermittent release	0,327	mg/l
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

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					442 mg/m3	442 mg/m3	221 mg/m3	221 mg/m3

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 ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

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

Use nitrile or butyl gloves for sporadic contacts. For prolonged contacts, locate the most suitable material with the DPI supplier.

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 I 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.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

PLDL

SECTION 8. Exposure controls/personal 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, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (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.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	colourless	
Odour	characteristic	
Melting point / freezing point	< 5 °C	
Initial boiling point	56 °C	
Boiling range	56-137 °C	
Flammability	highly flammable liquid and vapour	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	-28 °C	Method:lowest flash point of substances contained in mixture
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
pH	not available	
Kinematic viscosity	not determined	
Solubility	not determined by experimentation.	
Partition coefficient: n-octanol/water	not applicable	
Vapour pressure	not available	
Density and/or relative density	0,882 g/cm ³	Temperature: 20 °C
Relative vapour density	not determined	
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

VOC (Directive 2010/75/EC)	100,00 % - 882,00 g/litre
Explosive properties	not explosive, however formation of explosive air / vapor mixtures are possible
Oxidising properties	not oxidizing

SECTION 10. Stability and reactivity

10.1. Reactivity

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

ACETONE

Decomposes under the effect of heat.

SECTION 10. Stability and reactivity ... / >>

2-METHYLPENTANE-2,4-DIOL

Decomposes under the effect of heat.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

ACETONE

Risk of explosion on contact with: bromine trifluoride,fluorine dioxide,hydrogen peroxide,nitrosyl chloride,2-methyl-1,3 butadiene,nitromethane,nitrosyl perchlorate.May react dangerously with: potassium tert-butoxide,alkaline hydroxides,bromine,bromoform,isoprene,sodium,sulphur dioxide,chromium trioxide,chromyl chloride,nitric acid,chloroform,peroxymonosulphuric acid,phosphoryl oxychloride,chromosulphuric acid,fluorine,strong oxidising agents,strong reducing agents.Develops flammable gas on contact with: nitrosyl perchlorate.

ETHYLBENZENE

Reacts violently with: strong oxidants.Attacks various types of plastic materials.May form explosive mixtures with: air.

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. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

ACETONE

Avoid exposure to: sources of heat,naked flames.

2-METHYLPENTANE-2,4-DIOL

Avoid exposure to: sources of heat,naked flames.

10.5. Incompatible materials

ACETONE

Incompatible with: acids,oxidising substances.

2-METHYLPENTANE-2,4-DIOL

Incompatible with: strong acids,strong oxidants.Compatible materials: carbon steel,aluminium.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

ACETONE

May develop: ketenes,irritant substances.

ETHYLBENZENE

May develop: methane,styrene,hydrogen,ethane.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

METHANOL

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

ETHYLBENZENE

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

SECTION 11. Toxicological information ... / >>

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

METHANOL

The minimum lethal dose for humans by ingestion is considered to be in the range from 300 to 1000 mg/kg. Ingestion of 4-10 ml of the substance may cause permanent blindness in adult humans (IPCS).

ETHYLBENZENE

As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispesl). Is irritating for skin, conjunctiva and respiratory tract.

XYLENE (MIXTURE OF ISOMERS)

Toxic action on the central nervous system (encephalopathies); irritant action on the skin, conjunctiva, cornea and respiratory system.

Interactive effects

XYLENE (MIXTURE OF ISOMERS)

Alcohol intake interferes with the metabolism of the substance, inhibiting it. The consumption of ethanol (0.8 g / kg) before a 4-hour exposure to xylenes vapors (145 and 280 ppm) causes a 50% decrease in the excretion of methyluric acid, while the concentration in the blood of xylenes rises about 1.5-2 times. At the same time, there is an increase in the side effects of ethanol. The metabolism of xylenes is increased by phenobarbital and 3-methylcolantrene enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with glycine, which has the consequence of decreasing urinary excretion of metilippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

METHYL FORMATE

LD50 (Dermal):	4000 mg/kg Rat
LD50 (Oral):	1500 mg/kg Rat
LC50 (Inhalation vapours):	25 mg/l/4h Rat
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)

DIISOPROPYLETHER

LD50 (Dermal):	> 2000 mg/kg Rabbit
LD50 (Oral):	> 2000 mg/kg Rat
LC50 (Inhalation vapours):	20 mg/l

METHYL ACETATE

LD50 (Dermal):	> 2000 mg/kg
LD50 (Oral):	6482 mg/kg
LC50 (Inhalation vapours):	49,2 mg/l/4h

ACETONE

LD50 (Dermal):	7426 mg/kg Rat
LD50 (Oral):	5800 mg/kg Rat
LC50 (Inhalation vapours):	76 mg/l/4h Rabbit

PROPAN-2-OL

LD50 (Dermal):	> 5000 mg/kg Rabbit
LD50 (Oral):	> 5000 mg/kg Rat
LC50 (Inhalation vapours):	> 100000 mg/m3 Rat

METHANOL

LD50 (Dermal):	17100 mg/kg Rabbit
STA (Dermal):	300 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)
LD50 (Oral):	1187 mg/kg Rat
STA (Oral):	100 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)

PLDL

SECTION 11. Toxicological information ... / >>

LC50 (Inhalation vapours): 43,7 mg/l/4h Rabbit
STA (Inhalation vapours): 3 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)

ETHYLBENZENE
LD50 (Dermal): 15354 mg/kg Rabbit
LD50 (Oral): 3500 mg/kg Rat
LC50 (Inhalation vapours): 17,6 mg/l/4h Rat

2-METHYLPENTANE-2,4-DIOL
LC50 (Inhalation vapours): 66 ppm 8h - Rat

XYLENE (MIXTURE OF ISOMERS)
LD50 (Dermal): 2000 mg/kg Rabbit
LD50 (Oral): 3523 mg/kg Rat
LC50 (Inhalation vapours): 27,541 mg/l/4h Rat
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)

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

ETHYLBENZENE

Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).
Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

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) claims that "the data were inadequate for an assessment of the carcinogenic potential".

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

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

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

METHYL FORMATE

LC50 - for Fish 115 mg/l/96h *Leuciscus idus*
EC50 - for Crustacea > 500 mg/l/48h *Daphnia magna*
EC50 - for Algae / Aquatic Plants 1062 mg/l/72h

DIISOPROPYLETHER

LC50 - for Fish > 100 mg/l/96h *Pimephales promelas*
EC50 - for Crustacea > 100 mg/l/48h *Daphnia magna*
EC10 for Algae / Aquatic Plants 370 mg/l/3h *Fango attivo*

METHYL ACETATE

LC50 - for Fish 250 mg/l/96h *Brachydanio rerio*
EC50 - for Crustacea 1026,7 mg/l/48h *Daphnia magna*
EC50 - for Algae / Aquatic Plants 120 mg/l/72h *Scenedesmus subspicatus*

ACETONE

LC50 - for Fish 5540 mg/l/96h *Lepomis macrochirus*
EC50 - for Crustacea 8800 mg/l/48h *Daphnia pulex*
Chronic NOEC for Crustacea 2212 mg/l/28d *Daphnia magna*

PROPAN-2-OL

LC50 - for Fish 4200 mg/l/96h
EC50 - for Crustacea > 100 mg/l *Daphnia magna*

METHANOL

LC50 - for Fish 15400 mg/l/96h *Lepomis macrochirus*
EC50 - for Crustacea 18000 mg/l/48h *Daphnia magna*
EC50 - for Algae / Aquatic Plants 22000 mg/l/72h *Selenastrum capricornutum*
Chronic NOEC for Fish 446,7 mg/l/28d
Chronic NOEC for Crustacea 208 mg/l/21d

12.2. Persistence and degradability

METHYL ACETATE

Solubility in water 243500 mg/l
Rapidly degradable

ACETONE

Rapidly degradable

PROPAN-2-OL

Rapidly degradable

METHANOL

Solubility in water 1000 - 10000 mg/l
Rapidly degradable

ETHYLBENZENE

Solubility in water 1000 - 10000 mg/l
Rapidly degradable

2-METHYLPENTANE-2,4-DIOL

Solubility in water > 10000 mg/l
Rapidly degradable

XYLENE (MIXTURE OF ISOMERS)

Solubility in water 60 mg/l ASTM E1148
Degradability: information not available

SECTION 12. Ecological information ... / >>

12.3. Bioaccumulative potential

METHYL FORMATE		
Partition coefficient: n-octanol/water		-0,21 Log Kow
METHYL ACETATE		
Partition coefficient: n-octanol/water		0,18
ACETONE		
Partition coefficient: n-octanol/water		-0,24
BCF		3
PROPAN-2-OL		
Partition coefficient: n-octanol/water		0,05
METHANOL		
Partition coefficient: n-octanol/water		0,82
BCF		< 10
ETHYLBENZENE		
Partition coefficient: n-octanol/water		3,6
2-METHYLPENTANE-2,4-DIOL		
Partition coefficient: n-octanol/water		< -0,14
XYLENE (MIXTURE OF ISOMERS)		
Partition coefficient: n-octanol/water		3,16
BCF		25,9

12.4. Mobility in soil

METHYL ACETATE		
Partition coefficient: soil/water		0,18

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 \geq 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.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1263

PLDL

SECTION 14. Transport information ... / >>

14.2. UN proper shipping name

ADR / RID: PAINT RELATED MATERIAL
 IMDG: PAINT RELATED MATERIAL
 IATA: PAINT RELATED MATERIAL

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: II

14.5. Environmental hazards

ADR / RID: NO
 IMDG: NO
 IATA: NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 33	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
	Special provision: 163, 367, 640D, 650		
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 364
	Passengers:	Maximum quantity: 5 L	Packaging instructions: 353
	Special provision:	A3, A72, A192	

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/EC: P5c

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

<u>Product</u>	
Point	3 - 40
<u>Contained substance</u>	
Point	75
Point	69 METHANOL REACH Reg.: 01-2119433307-44-XXXX

Regulation (EC) No. 2019/1148 - on the marketing and use of explosives precursors

Regulated explosives precursor

The acquisition, introduction, possession or use of that regulated explosives precursor by members of the general public is subject to reporting obligations as set out in Article 9.

All suspicious transactions and significant disappearances and thefts must be reported to the relevant national contact point.

Substances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

SECTION 15. Regulatory information ... / >>

Substances subject to exportation reporting pursuant to (EC) Reg. 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 been performed for the following contained substances

METHYL FORMATE

METHYL ACETATE

ACETONE

PROPAN-2-OL

XYLENE (MIXTURE OF ISOMERS)

SECTION 16. Other information

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

Flam. Liq. 1	Flammable liquid, category 1
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Repr. 2	Reproductive toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
STOT SE 1	Specific target organ toxicity - single exposure, category 1
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
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 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H370	Causes damage to organs.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
EUH019	May form explosive peroxides.
EUH066	Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule

SECTION 16. Other information ... / >>

- 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 NUMBER: 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: EC Regulation 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)
22. Delegated Regulation (UE) 2022/692 (XVIII 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.

SECTION 16. Other information ... / >>

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.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 10 / 11 / 12 / 15 / 16.