



**SECTION 2. Hazards identification** ... / >>

Reproductive toxicity, effects on or via lactation	H362	May cause harm to breast-fed children.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic to aquatic life with long lasting effects.

**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:

<b>H226</b>	Flammable liquid and vapour.
<b>H362</b>	May cause harm to breast-fed children.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H335</b>	May cause respiratory irritation.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.
<b>EUH208</b>	Contains: MALEIC ANHYDRIDE Fatty acids, tall-oil, compds. with oleylamine Fatty acids, C18-unsatd., trimers, compds. with oleylamine May produce an allergic reaction.

Precautionary statements:

<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P260</b>	Do not breathe dust / fume / gas / mist / vapours / spray.
<b>P331</b>	Do NOT induce vomiting.
<b>P201</b>	Obtain special instructions before use.
<b>P263</b>	Avoid contact during pregnancy and while nursing.
<b>P280</b>	Wear protective gloves/ protective clothing / eye protection / face protection.

**Contains:** chlorinated paraffins, C14-17  
HYDROCARBONS, C9, AROMATICS  
Hydrocarbons, C10 aromatics, <1% naphthalene  
N-BUTYL ACETATE

VOC (Directive 2004/42/EC) :

One - pack performance coatings.

VOC given in g/litre of product in a ready-to-use condition : 477,86

Limit value: 500,00

**2.3. Other hazards**

PBT substances contained:  
chlorinated paraffins, C14-17

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 (EC) 1272/2008 (CLP)
<b>HYDROCARBONS, C9, AROMATICS</b>		
<b>INDEX</b>	20 ≤ x < 25	<b>Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066</b>
EC	918-668-5	
CAS	128601-23-0	
REACH Reg.	01-2119455851-35	
<b>Hydrocarbons, C10 aromatics, &lt;1% naphthalene</b>		
<b>INDEX</b>	11 ≤ x < 15	<b>Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066</b>
EC	918-811-1	
CAS	1189173-42-9	
REACH Reg.	01-2119463583-34	
<b>chlorinated paraffins, C14-17</b>		
<b>INDEX</b>	11 ≤ x < 15	<b>Lact. H362, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1, EUH066</b>
EC	287-477-0	
CAS	85535-85-9	
REACH Reg.	01-2119519269-33	
<b>N-BUTYL ACETATE</b>		
<b>INDEX</b>	3 ≤ x < 5	<b>Flam. Liq. 3 H226, STOT SE 3 H336, EUH066</b>
EC	204-658-1	
CAS	123-86-4	
REACH Reg.	01-2119485493-29	
<b>2-METHOXY-1-METHYLETHYL ACETATE</b>		
<b>INDEX</b>	1 ≤ x < 3	<b>Flam. Liq. 3 H226, STOT SE 3 H336</b>
EC	203-603-9	
CAS	108-65-6	
REACH Reg.	01-2119475791-29	
<b>Fatty acids, C18-unsatd., trimers, compds. with oleylamine</b>		
<b>INDEX</b>	0,1 ≤ x < 0,5	<b>Acute Tox. 4 H302, STOT RE 2 H373, Skin Sens. 1 H317, Aquatic Chronic 2 H411 LD50 Oral: 1570 mg/kg</b>
EC	604-612-4	
CAS	147900-93-4	
REACH Reg.	01-2119971821-33	
<b>MIXED XYLENES, ETHYLBENZENE</b>		
<b>INDEX</b>	0 < x < 0,1	<b>Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Classification note according to Annex VI to the CLP Regulation: C ATE Dermal: 1100 mg/kg, ATE Inhalation vapours: 11 mg/l</b>
EC	215-535-7	
CAS	1330-20-7	
REACH Reg.	01-2119488216-32	
<b>Fatty acids, tall-oil, compds. with oleylamine</b>		
<b>INDEX</b>	0 < x < 0,1	<b>STOT RE 2 H373, Eye Dam. 1 H318, Skin Sens. 1A H317</b>
EC	288-315-1	
CAS	85711-55-3	
REACH Reg.	01-2119974148-28	
<b>ETHYLBENZENE</b>		
<b>INDEX</b>	0 < x < 0,1	<b>Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Aquatic Chronic 3 H412 LC50 Inhalation vapours: 17,2 mg/l/4h</b>
EC	202-849-4	
CAS	100-41-4	
REACH Reg.	01-2119489370-35	
<b>XYLENE (MIXTURE OF ISOMERS)</b>		
<b>INDEX</b>	0 < x < 0,01	<b>Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Classification note according to Annex VI to the CLP Regulation: C ATE Dermal: 1100 mg/kg, ATE Inhalation vapours: 11 mg/l</b>
EC	215-535-7	
CAS	1330-20-7	
REACH Reg.	01-2119488216-32	

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

#### ETHYLBENZENE

INDEX 601-023-00-4 0 < x < 0,01 **Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373**  
 EC 202-849-4 **LC50 Inhalation vapours: 17,2 mg/l/4h**  
 CAS 100-41-4  
 REACH Reg. 01-2119489370-35

#### MALEIC ANHYDRIDE

INDEX 607-096-00-9 0 < x < 0,001 **Acute Tox. 4 H302, STOT RE 1 H372, Skin Corr. 1B H314, Eye Dam. 1 H318,**  
**Resp. Sens. 1 H334, Skin Sens. 1A H317, EUH071**  
 EC 203-571-6 **Skin Sens. 1A H317: ≥ 0,001%**  
 CAS 108-31-6 **LD50 Oral: 1090 mg/kg**  
 REACH Reg. 01-2119472428-31

#### Quartz (Respirable Crystalline Silica)

INDEX 0 < x < 0,01 **STOT RE 1 H372**  
 EC 238-878-4  
 CAS 14808-60-7

#### ETHYL METHYL KETONE

INDEX 606-002-00-3 0 < x < 0,01 **Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066**  
 EC 201-159-0  
 CAS 78-93-3  
 REACH Reg. 01-2119457290-43

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

#### 2-METHOXY-1-METHYLETHYL ACETATE

1-METHYL-2-METHOXYETHYL ACETATE - composition:

2-methoxypropyl acetate: content (W/W): < 0.3 %

CAS number: 70657-70-4 ; EC number: 274-724-2; Index Number: 607-251-00-0

Flam. Liq. 3 - Repr. 1B (fetus) - STOT SE 3 (irrit. for respiratory system) H226, H335, H360D.

### SECTION 4. First aid measures

#### 4.1. Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

**EYES:** Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

**SKIN:** Take off contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice.

Avoid further contact with contaminated clothing.

**INGESTION:** Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

**INHALATION:** Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

#### Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

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

**DELAYED EFFECTS:** Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

IF exposed or concerned: Get medical advice / attention.

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment: see section 4.1

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

## 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.

Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well 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.

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

2-METHOXY-1-METHYLETHYL ACETATE

Store in an inert atmosphere, sheletered from moisture because it hydrolises easily.

**7.3. Specific end use(s)**

Information not available

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

**8.1. Control parameters**

Regulatory references:

ALB	Shqipëria	VENDIM Nr. 522, datë 6.8.2014 PËR MIRATIMIN E RREGULLORES "PËR MBROJTJEN E SIGURISË DHE SHËNDETIT TË PUNËMARRËSVE NGA RISQET E LIDHURA ME AGJENTËT KIMIKË NË PUNË"
CZE	Česká Republika	NAŘÍZENÍ VLÁDY ze dne 18. října 2023, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	WirkungDosisNOAELMAK-und BAT-Werte-Liste 2024 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe
ESP	España	Límites de exposición profesional para agentes químicos en España 2024
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021
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 μεταλλαξιογόνους παράγοντες κατά την εργασία"»
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
HRV	Hrvatska	PRAVILNIK O IZMJENAMA I DOPUNAMA PRAVILNIKA O ZAŠTITI RADNIKA OD IZLOŽENOSTI OPASNIM KEMIKALIJAMA NA RADU, GRANIČNIM VRIJEDNOSTIMA IZLOŽENOSTI I BIOLOŠKIM GRANIČNIM VRIJEDNOSTIMA
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Regeling van de Minister van Sociale Zaken en Werkgelegenheid van 13 mei 2024, nr. 2024-0000092805, tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2022/431
PRT	Portugal	Decreto-Lei n.º 102/2024, de 4 de dezembro. Sumário: Transpõe para a ordem jurídica interna a Diretiva (UE) 2022/431, relativa à proteção dos trabalhadores contra riscos ligados à exposição a agentes cancerígenos ou mutagénicos e procede à quarta alteração
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 24 czerwca 2024 r. zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	HOTĂRÂRE nr. 179 din 28 februarie 2024 pentru modificarea și completarea Hotărârii Guvernului nr. 1.093/2006 privind stabilirea cerințelor minime de securitate și sănătate pentru protecția lucrătorilor împotriva riscurilor legate de expunerea la agenți ca
RUS	Россия	ПОСТАНОВЛЕНИЕ от 13 февраля 2018 г. N 25 ОБ УТВЕРЖДЕНИИ ГИГИЕНИЧЕСКИХ НОРМАТИВОВ ГН 2.2.5.3532-18 "ПРЕДЕЛЬНО ДОПУСТИМЫЕ КОНЦЕНТРАЦИИ (ПДК) ВРЕДНЫХ ВЕЩЕСТВ В ВОЗДУХЕ РАБОЧЕЙ ЗОНЫ"
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti rakotvornim, mutagenim ali reprotoksičnim snovem pri delu. Ljubljana, četrtek 4. 4. 2024
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.
	ACGIH	ACGIH 2025
	RCP	ACGIH TLVs and BEIs – Appendix H

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

#### 2-METHOXY-1-METHYLETHYL ACETATE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	ALB	275	50	550	100	
TLV	CZE	275	50	550	100	SKIN
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
VLA	ESP	275	50	550	100	SKIN
VLEP	FRA	275	50	550	100	SKIN
TLV	GRC	275	50	550	100	
AK	HUN	275	50	550	100	
GVI/KGVI	HRV	275	50	550	100	SKIN
VLEP	ITA	275	50	550	100	SKIN Allegato XXXVIII D.Lgs. 81/08
TGG	NLD	550				
VLE	PRT	275	50	550	100	SKIN
NDS/NDSch	POL	260		520		SKIN
TLV	ROU	275	50	550	100	SKIN
ПДК	RUS			10		n
MV	SVN	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	SKIN
OEL	EU	275	50	550	100	SKIN

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,635	mg/l
Normal value in marine water	0,0635	mg/l
Normal value for fresh water sediment	3,29	mg/kg
Normal value for marine water sediment	0,329	mg/kg
Normal value for water, intermittent release	6,35	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	0,29	mg/kg

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Effects on workers					
	Acute	Acute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
	local	systemic	local	systemic	local	systemic	local	systemic
Oral				36				
				mg/kg/d				
Inhalation				33			NPI	275
				mg/m3				mg/m3
Skin			NPI	320			NPI	796
				mg/kg/d				mg/kg/d

#### Quartz (Respirable Crystalline Silica)

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP		0,05			RESP
VLEP	FRA	0,1				RESP
GVI/KGVI	HRV	0,1				
VLEP	ITA	0,1				RESP Allegato XXXVIII D. Lgs. 81/08
TGG	NLD	0,075				RESP
VLE	PRT	0,05				RESP
NDS/NDSch	POL	0,1				RESP
TLV	ROU	0,1				RESP
MV	SVN	0,05				RESP
OEL	EU	0,1				RESP
ACGIH		0,025				RESP

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

**ETHYLBENZENE**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	ALB	442	100	884	200	SKIN
TLV	CZE	200	45,33	500	113,32	SKIN
AGW	DEU	88	20	176	40	SKIN
MAK	DEU	88	20	176	40	SKIN
VLA	ESP	441	100	884	200	SKIN
VLEP	FRA	88,4	20	442	100	SKIN
TLV	GRC	435	100	545	125	
AK	HUN	442	100	884	200	SKIN
GVI/KGVI	HRV	442	100	884	200	SKIN
VLEP	ITA	442	100	884	200	SKIN Allegato XXXVIII D.Lgs. 81/08
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
ПДК	RUS	50		150		n
MV	SVN	442	100	884	200	SKIN
WEL	GBR	441	100	552	125	SKIN
OEL	EU	442	100	884	200	SKIN
ACGIH		87	20			

**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/d
Normal value for marine water sediment	1,37	mg/kg/d
Normal value for marine water, intermittent release	0,1	mg/l
Normal value of STP microorganisms	9,6	mg/l
Normal value for the food chain (secondary poisoning)	20	mg/kg
Normal value for the terrestrial compartment	2,68	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		NPI		1,6 mg/kg bw/d				
Inhalation	LOW	LOW	LOW	15 mg/m3	293 mg/m3	LOW	442 mg/m3	77 mg/m3
Skin	NPI	NPI	NPI	NPI	NPI	NPI	NPI	180 mg/kg bw/d

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

**ETHYL METHYL KETONE**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
TLV	ALB	600	200	900	300	
TLV	CZE	600	200	900	300	
AGW	DEU	600	200	600	200	SKIN
MAK	DEU	600	200	600	200	SKIN
VLA	ESP	600	200	900	300	
VLEP	FRA	600	200	900	300	SKIN
TLV	GRC	600	200	900	300	
AK	HUN	600	200	900	300	SKIN
GVI/KGVI	HRV	600	200	900	300	
VLEP	ITA	600	200	900	300	Allegato XXXVIII D.Lgs. 81/08
TGG	NLD	590		500		SKIN
VLE	PRT	600	200	900	300	
NDS/NDSch	POL	450		900		SKIN
TLV	ROU	600	200	900	300	
ПДК	RUS	200		400		n
MV	SVN	600	200	900	300	SKIN
WEL	GBR	600	200	899	300	SKIN
OEL	EU	600	200	900	300	
ACGIH			75		150	SKIN

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	55,8	mg/l
Normal value in marine water	55,8	mg/l
Normal value for fresh water sediment	284,74	mg/kg
Normal value of STP microorganisms	709	mg/l
Normal value for the food chain (secondary poisoning)	100	mg/kg
Normal value for the terrestrial compartment	22,5	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				31				
				mg/kg bw/d				
Inhalation				106				600
				mg/m <sup>3</sup>				mg/m <sup>3</sup>
Skin				412				1161
				mg/kg bw/d				mg/kg bw/d

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

#### N-BUTYL ACETATE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	241	50	723	150	
AGW	DEU	300	62	600	124	
MAK	DEU	480	100	960	200	
VLA	ESP	241	50	723	150	
VLEP	FRA	241	50	723	150	
TLV	GRC	710	150	950	200	
AK	HUN	241	50	723	150	
GVI/KGVI	HRV	241	50	723	150	
VLEP	ITA	241	50	723	150	Allegato XXXVIII D.Lgs. 81/08
TGG	NLD	150				
VLE	PRT	241	50	723	150	
NDS/NDSch	POL	240		720		
TLV	ROU	241	50	723	150	
ПДК	RUS			0,1		n
MV	SVN	241	50	723	150	
WEL	GBR	724	150	966	200	
OEL	EU	241	50	723	150	
ACGIH			50		150	

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,18	mg/l
Normal value in marine water	0,018	mg/l
Normal value for fresh water sediment	0,981	mg/kg/d
Normal value for marine water sediment	0,0981	mg/kg/d
Normal value for water, intermittent release	0,36	mg/l
Normal value of STP microorganisms	35,6	mg/l
Normal value for the terrestrial compartment	0,0903	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		2 mg/kg/d		2 mg/kg/d				
Inhalation	300 mg/m3	300 mg/m3	35,7 mg/m3	35,7 mg/m3	600 mg/m3	600 mg/m3	300 mg/m3	300 mg/m3
Skin		6 mg/kg/d		6 mg/kg/d		11 mg/kg bw/d		11 mg/kg bw/d

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

**MALEIC ANHYDRIDE**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	1		2		
AGW	DEU	0,081	0,02	0,081	0,02	11
MAK	DEU	0,081	0,02	0,081 (C)	0,02 (C)	C = 0,20 mg/m3
VLA	ESP	0,4	0,1			
VLEP	FRA			1		
TLV	GRC	1				
AK	HUN	0,08	0,2	0,08	0,2	
GVI/KGVI	HRV	0,41	0,1	0,8	0,2	INHAL
GVI/KGVI	HRV	0,41	0,1	0,8	0,2	SKIN
NDS/NDSch	POL	0,5		1		SKIN
TLV	ROU	1	0,25	3	0,75	
ПДК	RUS			1		n + a, A
MV	SVN	0,41	0,1	0,41	0,1	
WEL	GBR	1		3		
ACGIH		0,01	0,0025			INHAL

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,038	mg/l
Normal value in marine water	0,004	mg/l
Normal value for fresh water sediment	0,296	mg/kg/d
Normal value for marine water sediment	0,03	mg/kg/d
Normal value of STP microorganisms	44,6	mg/l
Normal value for the terrestrial compartment	0,037	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
Inhalation					0,2 mg/m3	0,2 mg/m3	0,081 mg/m3	0,081 mg/m3

**Fatty acids, C18-unsatd., trimers, compds. with oleylamine**

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	6	µg/L
Normal value in marine water	0,0006	mg/l
Normal value for fresh water sediment	2,46	mg/kg
Normal value for marine water sediment	250	µg/kg
Normal value for marine water, intermittent release	600	ng/l
Normal value of STP microorganisms	NPI	
Normal value for the food chain (secondary poisoning)	470	µg/kg
Normal value for the terrestrial compartment	280	µg/kg
Normal value for the atmosphere	NPI	

**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		NPI		12,0 µg/kg				
Skin		NPI	HIGH	12,0 µg/kg	HIGH	NPI	HIGH	24,0 µg/kg

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

**Fatty acids, tall-oil, compds. with oleylamine**

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	NPI
Normal value in marine water	NPI
Normal value for fresh water sediment	NEA
Normal value for marine water sediment	NEA
Normal value of STP microorganisms	NPI
Normal value for the food chain (secondary poisoning)	470 µg/kg
Normal value for the terrestrial compartment	NEA
Normal value for the atmosphere	NPI

**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		NPI		12,0 µg/kg				
Inhalation		NEA	NEA	NEA	NEA	NEA	NEA	NEA
Skin		NPI	HIGH	12,0 µg/kg	HIGH	NPI	HIGH	24,0 µg/kg

**chlorinated paraffins, C14-17**

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,001 mg/l
Normal value in marine water	0,0002 mg/l
Normal value for fresh water sediment	13 mg/Kg/ d
Normal value for marine water sediment	2,6 mg/Kg/ d
Normal value of STP microorganisms	80 mg/l
Normal value for the food chain (secondary poisoning)	10 mg/kg
Normal value for the terrestrial compartment	11,9 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		NPI	NPI	0,58 mg/kg bw/d				
Inhalation	NPI	NPI	NPI	2 mg/m3	NPI	NPI	NPI	6,7 mg/m3
Skin	NPI	NPI	NPI	28,75 mg/kg bw/d	NPI	NPI	NPI	47,9 mg/kg bw/d

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

**MIXED XYLENES, ETHYLBENZENE**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	200		400		SKIN
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	440	100	880	200	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
TLV	GRC	435	100	650	150	
AK	HUN	221		442		SKIN
GVI/KGVI	HRV	221	50	442	100	SKIN
VLEP	ITA	221	50	442	100	SKIN Allegato XXXVIII D.Lgs. 81/08
TGG	NLD	210		442		SKIN
VLE	PRT	221	50	442	100	SKIN
NDS/NDSch	POL	100				
MV	SVN	221	50			SKIN
WEL	GBR	220	50	441	100	
OEL	EU	221	50	442	100	SKIN
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/d
Normal value for marine water sediment	12,46	mg/kg/d
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	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		NPI		5				
				mg/kg bw/d				
Inhalation	260	260	65,3	65,3	442	442	221	221
	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3	mg/m3
Skin	LOW	LOW	NPI	125		LOW		212
				mg/kg bw/d				mg/kg bw/d

**HYDROCARBONS, C9, AROMATICS**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
RCP		100	19			

**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		NPI		7,5				
				mg/kg bw/d				
Inhalation	NPI	NPI	NPI	32	NPI	NPI	NPI	151
				mg/m3				mg/m3
Skin	NPI	NPI	NPI	7,5	NPI	NPI	NPI	12,5
				mg/kg bw/d				mg/kg bw/d

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

**Hydrocarbons, C10 aromatics, <1% naphthalene**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
ACGIH		100	17			

**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				7,5 mg/kg/d				
Inhalation				32 mg/m3				151 mg/m3
Skin				7,5 mg/kg bw/d				12,5 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	
TLV	CZE	200	46	400	92	SKIN
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	440	100	880	200	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
TLV	GRC	435	100	650	150	
GVI/KGVI	HRV	221	50	442	100	SKIN
VLEP	ITA	221	50	442	100	SKIN Allegato XXXVIII D.Lgs. 81/08
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
MV	SVN	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
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 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
Oral								1,6 mg/kg/d
Inhalation				14,8 mg/m3	289 mg/m3	289 mg/m3		77 mg/m3
Skin				108 mg/kg/d				180 mg/kg/d

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

#### ETHYLBENZENE

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
TLV	CZE	200	45,4	500	113,5	SKIN
AGW	DEU	88	20	176	40	SKIN
MAK	DEU	88	20	176	40	SKIN
VLA	ESP	441	100	884	200	SKIN
VLEP	FRA	88,4	20	442	100	SKIN
TLV	GRC	435	100	545	125	
AK	HUN	442		884		SKIN
GVI/KGVI	HRV	442	100	884	200	SKIN
VLEP	ITA	442	100	884	200	SKIN Allegato XXXVIII D.Lgs. 81/08
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
ПДК	RUS	50		150		n
MV	SVN	442	100	884	200	SKIN
WEL	GBR	441	100	552	125	SKIN
OEL	EU	442	100	884	200	SKIN
ACGIH		87	20			

##### 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/d
Normal value for marine water sediment	1,37	mg/kg/d
Normal value for marine water, intermittent release	0,1	mg/l
Normal value of STP microorganisms	9,6	mg/l
Normal value for the food chain (secondary poisoning)	20	mg/kg
Normal value for the terrestrial compartment	2,68	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		NPI		1,6 mg/kg bw/d				
Inhalation	LOW	LOW	LOW	15 mg/m <sup>3</sup>	293 mg/m <sup>3</sup>	LOW	442 mg/m <sup>3</sup>	77 mg/m <sup>3</sup>
Skin	NPI	NPI	NPI	NPI	NPI	NPI	NPI	180 mg/kg bw/d

##### 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.

#### HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, permeability time.

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.

Protect your hands with gloves of the following type:

Material: Laminated film - LLDPE

Thickness: 0,062 mm

Breakthrough time: 480 min

Material: Polyvinyl alcohol (PVA)

Glove thickness must be selected based on the minimum required breakthrough time.

Breakthrough time: 480 min

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

Material: Viton or fluoroelastomer (FKM)

Thickness: 0,7 mm

Breakthrough time: 480 min

### 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

Wear airtight protective goggles (see standard EN ISO 16321).

### RESPIRATORY PROTECTION

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. 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).

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.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	various	
Odour	characteristic of solvent	
Melting point / freezing point	not determined	Reason for missing data: not determined
Initial boiling point	not available	Substance: HYDROCARBONS, C9, AROMATICS Initial boiling point: 165 °C
Flammability	not determined	
Lower explosive limit	not determined	Reason for missing data: not determined
Upper explosive limit	not determined	Reason for missing data: not determined
Flash point	23 < T ≤ 60 °C	
Auto-ignition temperature	not determined	Reason for missing data: not determined
Decomposition temperature	not determined	Reason for missing data: not determined
pH	not applicable	Reason for missing data: substance/mixture is non-soluble (in water)
Kinematic viscosity	not determined	Reason for missing data: not determined
Dynamic viscosity	100 mPa*s	Method: EN ISO 2555 Temperature: 23 °C
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	not applicable	
Vapour pressure	not available	Substance: HYDROCARBONS, C9, AROMATICS Vapour pressure: 2 hPa Method: EN ISO 2811-1 Temperature: 23 °C
Density and/or relative density	1,15 kg/l	Reason for missing data: not determined
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 2004/42/EC) : 41,55 % - 477,86 g/litre

**SECTION 9. Physical and chemical properties** ... / >>

VOC (volatile carbon) 33,57 % - 386,04 g/litre

**SECTION 10. Stability and reactivity**

**10.1. Reactivity**

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

**2-METHOXY-1-METHYLETHYL ACETATE**

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

**ETHYL METHYL KETONE**

Reacts with: light metals, strong oxidants. Attacks various types of plastic materials. Decomposes under the effect of heat.

**N-BUTYL ACETATE**

Decomposes on contact with: water.

**chlorinated paraffins, C14-17**

Reacts with: alkaline metals, alkaline earth metals.

**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.

**2-METHOXY-1-METHYLETHYL ACETATE**

May react violently with: oxidising substances, strong acids, alkaline metals.

**ETHYLBENZENE**

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

**ETHYL METHYL KETONE**

May form peroxides with: air, light, strong oxidising agents. Risk of explosion on contact with: hydrogen peroxide, nitric acid, sulphuric acid. May react dangerously with: oxidising agents, trichloromethane, alkalis. Forms explosive mixtures with: air.

**N-BUTYL ACETATE**

Risk of explosion on contact with: strong oxidising agents. May react dangerously with: alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with: air.

**MIXED XYLENES, ETHYLBENZENE**

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

**ETHYLBENZENE**

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

**10.4. Conditions to avoid**

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

**ETHYL METHYL KETONE**

Avoid exposure to: sources of heat.

**N-BUTYL ACETATE**

Avoid exposure to: moisture, sources of heat, naked flames.

**chlorinated paraffins, C14-17**

Avoid contact with: strong oxidising agents.

Avoid exposure to: heat, overheated surfaces.

**10.5. Incompatible materials**

**2-METHOXY-1-METHYLETHYL ACETATE**

Incompatible with: oxidising substances, strong acids, alkaline metals.

**ETHYL METHYL KETONE**

Incompatible with: strong oxidants, inorganic acids, ammonia, copper, chloroform.

**N-BUTYL ACETATE**

Incompatible with: water, nitrates, strong oxidants, acids, alkalis, zinc.

**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.

**ETHYLBENZENE**

May develop: methane, styrene, hydrogen, ethane.

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

**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**
**MIXED XYLENES, ETHYLBENZENE**

Has a toxic effect on the CNS (encephalopathies). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

Metabolism, toxicokinetics, mechanism of action and other information
**2-METHOXY-1-METHYLETHYL ACETATE**

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

Information on likely routes of exposure
**N-BUTYL ACETATE**

WORKERS: inhalation; contact with the skin.

**2-METHOXY-1-METHYLETHYL ACETATE**

WORKERS: inhalation; contact with the skin.

**ETHYLBENZENE**

WORKERS: inhalation; contact with the skin.

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

**XYLENE (MIXTURE OF ISOMERS)**

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of environmental air.

**ETHYLBENZENE**

WORKERS: inhalation; contact with the skin.

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

Delayed and immediate effects as well as chronic effects from short and long-term exposure
**N-BUTYL ACETATE**

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

**2-METHOXY-1-METHYLETHYL ACETATE**

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

**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 (Ispes). Is irritating for skin, conjunctiva and respiratory tract.

**XYLENE (MIXTURE OF ISOMERS)**

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

**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 (Ispes). Is irritating for skin, conjunctiva and respiratory tract.

Interactive effects
**N-BUTYL ACETATE**

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility

**SECTION 11. Toxicological information ... / >>**

of a particular solvent (INRC, 2011).

**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) of the mixture: Not classified (no significant component)  
ATE (Oral) of the mixture: Not classified (no significant component)  
ATE (Dermal) of the mixture: Not classified (no significant component)

**HYDROCARBONS, C9, AROMATICS**

LD50 (Dermal): > 3160 mg/kg Rabbit  
LD50 (Oral): 3492 mg/kg Rat  
LC50 (Inhalation vapours): > 6193 mg/l/4h Rat

**Hydrocarbons, C10 aromatics, <1% naphthalene**

LD50 (Dermal): > 2000 mg/kg Rabbit  
LD50 (Oral): > 5000 mg/kg Rat

**chlorinated paraffins, C14-17**

LD50 (Oral): > 4000 mg/kg Rat

**N-BUTYL ACETATE**

LD50 (Dermal): > 14112 mg/kg Rabbit  
LD50 (Oral): 10760 mg/kg Rat  
LC50 (Inhalation vapours): 21,1 mg/l/4h Rat

**2-METHOXY-1-METHYLETHYL ACETATE**

LD50 (Dermal): 2000 mg/kg Rat  
LD50 (Oral): 6190 mg/kg Rat

**Fatty acids, C18-unsatd., trimers, compds. with oleylamine**

LD50 (Oral): 1570 mg/kg (rat)

**MIXED XYLENES, ETHYLBENZENE**

LD50 (Dermal): 4350 mg/kg Rabbit  
LD50 (Oral): 3523 mg/kg Rat  
LC50 (Inhalation vapours): 26 mg/l/4h Rat

**Fatty acids, tall-oil, compds. with oleylamine**

LD50 (Oral): 2000 mg/kg (rat)

**ETHYLBENZENE**

LD50 (Dermal): 15400 mg/kg Rabbit  
LD50 (Oral): 3500 mg/kg Rat  
LC50 (Inhalation vapours): 17,2 mg/l/4h Rat

**XYLENE (MIXTURE OF ISOMERS)**

LD50 (Dermal): 4350 mg/kg Rabbit  
LD50 (Oral): 3523 mg/kg Rat  
LC50 (Inhalation vapours): 26 mg/l/4h Rat

**ETHYLBENZENE**

LD50 (Dermal): 15400 mg/kg Rabbit  
LD50 (Oral): 3500 mg/kg Rat  
LC50 (Inhalation vapours): 17,2 mg/l/4h Rat

**MALEIC ANHYDRIDE**

LD50 (Dermal): 2620 mg/kg Rabbit  
LD50 (Oral): 1090 mg/kg Rat

**SECTION 11. Toxicological information ... / >>****ETHYL METHYL KETONE**

LD50 (Dermal): 6480 mg/kg Rabbit  
LD50 (Oral): 2737 mg/kg Rat  
LC50 (Inhalation vapours): 23,5 mg/l/8h Rat

**SKIN CORROSION / IRRITATION**

Repeated exposure may cause skin dryness or cracking.

**N-BUTYL ACETATE**

Species: rabbit  
Result: non-irritating  
Method: OECD 404

**2-METHOXY-1-METHYLETHYL ACETATE**

Species: rabbit  
Result: non-irritating  
Method: OECD 404

**XYLENE (MIXTURE OF ISOMERS)**

Causes irritation (redness, burning sensation), dryness and slight flaking of the skin

**SERIOUS EYE DAMAGE / IRRITATION**

Does not meet the classification criteria for this hazard class

**N-BUTYL ACETATE**

Species: rabbit  
Result: non-irritating  
Method: OECD 405

**2-METHOXY-1-METHYLETHYL ACETATE**

Species: rabbit  
Result: non-irritating  
Method: OECD 405

**XYLENE (MIXTURE OF ISOMERS)**

Irritating to eyes

**RESPIRATORY OR SKIN SENSITISATION**

May produce an allergic reaction.

Contains:

**MALEIC ANHYDRIDE**

Fatty acids, tall-oil, compds. with oleylamine

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

**N-BUTYL ACETATE**

Species: guinea pig  
Result: non-sensitizing  
Method: OECD 406

**2-METHOXY-1-METHYLETHYL ACETATE**

Species: guinea pig  
Result: non-sensitizing  
Method: OECD 406

**MALEIC ANHYDRIDE**

Species: rabbit  
Result: skin sensitization  
Method: OECD 406

**Skin sensitization**

Fatty acids, C18-unsatd., trimers, compds. with oleylamine

Skin sensitization:

Species: mouse

Method: OECD 429

Classification: sensitizing.

**SECTION 11. Toxicological information ... / >>**

Fatty acids, tall-oil, compds. with oleylamine  
Skin sensitization:  
Species: mouse  
Method: OECD 429  
Classification: sensitizing.

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) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

**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).

REPRODUCTIVE TOXICITY

May cause harm to breast-fed children.

STOT - SINGLE EXPOSURE

May cause respiratory irritation  
May cause drowsiness or dizziness

Target organs

**HYDROCARBONS, C9, AROMATICS**

Exposure methods: inhalation  
Target organs: central nervous system  
It can cause sleepiness or dizziness.

Exposure methods: inhalation

Target organs: respiratory tract  
It can irritate the respiratory tract.

**2-METHOXY-1-METHYLETHYL ACETATE**

Target organs: central nervous system  
It can cause sleepiness or dizziness.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

**HYDROCARBONS, C9, AROMATICS**

NOAEL - Oral = 600 mg/kg/bw/d  
Species: rat  
Method: OECD 408

NOAEC - Inhalation = 1800 mg/m<sup>3</sup>

Species: rat  
Method: OECD 413

Target organs

**SECTION 11. Toxicological information ... / >>**

Fatty acids, C18-unsatd., trimers, compds. with oleylamine  
Species: rat  
OECD 422 method  
Target organs: gastro-intestinal system  
Effects: May cause damage to organs in case of prolonged or repeated exposure

Fatty acids, tall-oil, compds. with oleylamine  
Species: rat  
OECD 422 method  
Target organs: gastro-intestinal system  
Effects: May cause damage to organs in case of prolonged or repeated exposure

ETHYLBENZENE  
Test: STOT RE - Route: Inhalation. Auditory system, ears

XYLENE (MIXTURE OF ISOMERS)  
May cause damage to organs (respiratory tract) through prolonged or repeated exposure.

ETHYLBENZENE  
Test: STOT RE - Route: Inhalation. Auditory system, ears

MALEIC ANHYDRIDE  
Respiratory tract.  
LOAEC: 0.01 mg/l  
Species: rat  
Method: Oecd 412  
Source: Echa

Route of exposure

Fatty acids, C18-unsatd., trimers, compds. with oleylamine  
Oral

Fatty acids, tall-oil, compds. with oleylamine  
Oral

MALEIC ANHYDRIDE  
Inhalation

ASPIRATION HAZARD

Toxic for aspiration

**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**

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it has negative effects on the aquatic environment.

**12.1. Toxicity**

HYDROCARBONS, C9, AROMATICS EC50 - for Crustacea	3,2 mg/l/48h Daphnia magna
Hydrocarbons, C10 aromatics, <1% naphthalene LC50 - for Fish	> 2 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	> 3 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	11 mg/l/72h Pseudokirchneriella subcapitata
Chronic NOEC for Algae / Aquatic Plants	2,5 mg/l Pseudokirchneriella subcapitata
chlorinated paraffins, C14-17 LC50 - for Fish	> 5000 mg/l/96h Alburnus alburnus
Chronic NOEC for Crustacea	1 mg/l 21 d

**SECTION 12. Ecological information ... / >>**

N-BUTYL ACETATE	
LC50 - for Fish	18 mg/l/96h Pimephales promelas
EC50 - for Crustacea	44 mg/l/48h Daphnia magna
Chronic NOEC for Crustacea	23 mg/l Daphnia magna
2-METHOXY-1-METHYLETHYL ACETATE	
LC50 - for Fish	> 100 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	500 mg/l/48h Daphnia magna
Chronic NOEC for Crustacea	100 mg/l Daphnia magna
Fatty acids, tall-oil, compds. with oleylamine	
Chronic NOEC for Crustacea	> 2,3 mg/l
MALEIC ANHYDRIDE	
LC50 - for Fish	75 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	42,81 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	74,35 mg/l/72h Pseudokirchneriella subcapitata
Chronic NOEC for Crustacea	10 mg/l Daphnia magna

**12.2. Persistence and degradability**

HYDROCARBONS, C9, AROMATICS

Rapidly degradable

Hydrocarbons, C10 aromatics, <1% naphthalene

Inherently degradable

chlorinated paraffins, C14-17

NOT rapidly degradable

N-BUTYL ACETATE

Solubility in water

1000 - 10000 mg/l

Rapidly degradable

>90% (28 d)

2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water

> 10000 mg/l

Rapidly degradable

83% (28 d, OECD 301 F)

MIXED XYLENES, ETHYLBENZENE

Degradability: information not available

Fatty acids, tall-oil, compds. with oleylamine

Rapidly degradable

ETHYLBENZENE

Solubility in water

1000 - 10000 mg/l

Rapidly degradable

XYLENE (MIXTURE OF ISOMERS)

Solubility in water

100 - 1000 mg/l

Degradability: information not available

ETHYLBENZENE

Solubility in water

1000 - 10000 mg/l

Rapidly degradable

MALEIC ANHYDRIDE

Solubility in water

> 10000 mg/l

Inherently degradable

ETHYL METHYL KETONE

Solubility in water

> 10000 mg/l

Rapidly degradable

**12.3. Bioaccumulative potential**

### SECTION 12. Ecological information ... / >>

N-BUTYL ACETATE	
Partition coefficient: n-octanol/water	2,3 25°C - OECD 117
BCF	15,3
2-METHOXY-1-METHYLETHYL ACETATE	
Partition coefficient: n-octanol/water	1,2 Log Kow 20°C - OECD 117
Fatty acids, C18-unsatd., trimers, compds. with oleylamine	
Partition coefficient: n-octanol/water	> 5,7
MIXED XYLENES, ETHYLBENZENE	
Partition coefficient: n-octanol/water	3,12
BCF	25,9
Fatty acids, tall-oil, compds. with oleylamine	
Partition coefficient: n-octanol/water	1
ETHYLBENZENE	
Partition coefficient: n-octanol/water	3,6
XYLENE (MIXTURE OF ISOMERS)	
Partition coefficient: n-octanol/water	3,12
BCF	25,9
ETHYLBENZENE	
Partition coefficient: n-octanol/water	3,6
MALEIC ANHYDRIDE	
Partition coefficient: n-octanol/water	-2,78
ETHYL METHYL KETONE	
Partition coefficient: n-octanol/water	0,3

#### 12.4. Mobility in soil

N-BUTYL ACETATE	
Partition coefficient: soil/water	< 3
MIXED XYLENES, ETHYLBENZENE	
Partition coefficient: soil/water	2,73
Fatty acids, tall-oil, compds. with oleylamine	
Partition coefficient: soil/water	4,6
XYLENE (MIXTURE OF ISOMERS)	
Partition coefficient: soil/water	2,73

#### 12.5. Results of PBT and vPvB assessment

PBT substances contained:  
chlorinated paraffins, C14-17

#### 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.

**SECTION 13. Disposal considerations** ... / >>

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. The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.  
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: UN 1263

**14.2. UN proper shipping name**

ADR / RID: PAINT  
IMDG: PAINT  
IATA: PAINT

**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: Environmentally Hazardous  
IMDG: Marine Pollutant  
IATA: NO



For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

**14.6. Special precautions for user**

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 lt	Tunnel restriction code: (D/E)
	Special provision: 163, 367, 650		
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 lt	Packaging instructions: 366
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 355
	Passengers:	Maximum quantity: 60 L	
	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/EU: P5c-E2

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)

chlorinated paraffins, C14-17  
REACH Reg.: 01-2119519269-33

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.

VOC (Directive 2004/42/EC) :

One - pack performance coatings.

### 15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

2-METHOXY-1-METHYLETHYL ACETATE  
ETHYL METHYL KETONE  
N-BUTYL ACETATE

## SECTION 16. Other information

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

<b>Flam. Liq. 2</b>	Flammable liquid, category 2
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Lact.</b>	Reproductive toxicity, effects on or via lactation
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>STOT RE 1</b>	Specific target organ toxicity - repeated exposure, category 1
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Resp. Sens. 1</b>	Respiratory sensitization, category 1
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Skin Sens. 1A</b>	Skin sensitization, category 1A
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3

**SECTION 16. Other information ... / >>**

<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H362</b>	May cause harm to breast-fed children.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H372</b>	Causes damage to organs through prolonged or repeated exposure.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H334</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.
<b>EUH071</b>	Corrosive to the respiratory tract.

**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
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- 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
- vPvM: Very persistent and very mobile
- 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

**SECTION 16. Other information ... / >>**

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)
23. Delegated Regulation (UE) 2023/707
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27. Delegated Regulation (UE) 2024/2564 (XXII 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.

**Changes to previous review:**

The following sections were modified:

02 / 03 / 08 / 09 / 12 / 14.