FR MAREMINERALE

Revision nr. 3 Dated 07/05/2022 Printed on 07/05/2022 Page n. 1/20 Replaced revision:2 (Dated: 07/03/2021)

Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH This Safety Data Sheet cancels and replaces all preceding SDS for this product.

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

1.1. Product identifier

Code:

FR MAREMINERALE Product name

Essence in hydro-alcoholic solution Chemical name and synonym

R410-J010-X00G-8WFV UFI:

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

Perfume for the environment Intended use

Identified Uses	Industrial	Professional	Consumer	
Consumer use		~	4	
00110411101 400		✓	✓	

Uses Advised Against

Not to be used as a personal perfume.

1.3. Details of the supplier of the safety data sheet

Name **CULTI MILANO SpA** Full address Via dell'Aprica, 12 District and Country 20158 Milano (MI)

Italy

Tel. +39 02/49784974 Fax +39 02/49789135

e-mail address of the competent person

responsible for the Safety Data Sheet culti@culti.com

1.4. Emergency telephone number

For urgent inquiries refer to

CULTI MILANO SpA - Tel. +39 02/49784974 (Contact from Monday to Friday from 8.30 / 12.30 AM- 1.30 / 6.00 PM)

ITALIAN POISON CENTER

Ospedale Niguarda Cà Granda - Milano Tel. +39 02/66101029

CAV Centro Nazionale Informazione Tossicologica - Pavia Tel. +39 0382/24444

Centro Antiveleni Bergamo - +39 80011858 (CAV Ospedali Riuniti - Bergamo) Centro Antiveleni Verona - +39 800011858 (Azienda Ospedaliera Integrata - Verona)

Centro Antiveleni Firenze - Tel. +39 055/7947819 (Azienda Ospedaliera 'Careggi' U.O. Tossicologia Medica-Firenze)

Centro Antiveleni Roma - Tel. +39 06/3054343 (CAV Policlinico Gemelli - Roma)

Centro Antiveleni Roma - Tel. +39 06/49978000 (CAV Policlinico Umberto I - Roma)

Centro Antiveleni Roma - Tel. +39 06/68593726 (CAV Osp.Pediatrico 'Bambino Gesù' DEA - Roma)

Centro Antiveleni Napoli - Tel. +39 081/7472870 (CAV Ospedale Cardarelli - Napoli) Centro Antiveleni Foggia - Tel. +39 800183459 (CAV Az. Osp. Univ. Foggia - Foggia)

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. Causes serious eye irritation. Eye irritation, category 2 H319

Hazardous to the aquatic environment, chronic toxicity, category 3 H412 Harmful to aquatic life with long lasting effects.

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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.

H412 Harmful to aquatic life with long lasting effects.

EUH208 Contains: Hexyl salicylate, Linalool, Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphtalenyl) -,

Butylphenyl methylpropional, Benzenepropanal, 4-Methoxy-. Alpha.-Methyl-, 1,6-Nonadien-3-Ol, 3,7-Dimethyl-, (R)-P-

MENTHA-1,8-DIENE, Linalyl acetate, 2-Phenylmethyleneoctanal, 3-Octanol, 3,7-Dimethyl-

May produce an allergic reaction.

Precautionary statements:

P501 Dispose of contents / container to local rulements.

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.
P101 If medical advice is needed, have product container or label at hand.

P370+P378 In case of fire: use chemical extinguisher to extinguish.

P102 Keep out of reach of children.

PACK2 The packing must have tactive indications of danger for blind people.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%. The product does not contain substances with endocrine disrupting properties in concentration >= 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP

ETHANOL

CAS 64-17-5 86 ≤ x < 90 Flam. Liq. 2 H225, Eye Irrit. 2 H319

EC 200-578-6

INDEX 603-002-00-5

REACH Reg. 01-2119457610-43-0000

3-Octanol, 3,7-Dimethyl-

CAS 78-69-3 0,5 ≤ x < 0,6 Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B

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		01703/2021)
		H317
EC 201-133-9		пэт
INDEX -		
REACH Reg. 01-2119454788-21		
2-Phenylmethyleneoctanal		
CAS 165184-98-5	$0.3 \le x < 0.35$	Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1,
EC 639-566-4		Aquatic Chronic 2 H411
INDEX -		
REACH Reg. 01-2119533092-50		
Oxacyclohexadecen-2-One		
CAS 34902-57-3	$0.3 \le x < 0.35$	Aquatic Acute 1 H400 M=1, Aquatic Chronic 1
EC 422-320-3		H410 M=1
INDEX -		
REACH Reg. 01-0000016883-62		
(R)-P-MENTHA-1,8-DIENE		
CAS 5989-27-5	$0.3 \le x < 0.35$	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412
EC 227-813-5		W=1, Aquatic Officials of 1412
INDEX 601-096-00-2		
REACH Reg. 01-2119529223-47		
Linalyl acetate		
CAS 115-95-7	$0.3 \le x < 0.35$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317
EC 204-116-4		11017
INDEX -		
REACH Reg. 01-2119983608-21-0000		
Butylphenyl methylpropional		
CAS 80-54-6	$0,15 \le x < 0,2$	Repr. 1B H360, Acute Tox. 4 H302, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Chronic 3 H412
EC 201-289-8		STA Oral: 500 mg/kg
INDEX -		
REACH Reg. 01-2119485965-18-0000		
Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro- 2,3,8,8-Tetramethyl-2-Naphtalenyl) - CAS 54464-57-2	0,15 ≤ x < 0,2	Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic
	-,,	Chronic 1 H410 M=1
EC 259-174-3		
INDEX -		
REACH Reg. 01-2119489989-04-0000		
Hexyl salicylate		
CAS 6259-76-3	$0,15 \le x < 0,2$	Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 228-408-6		
INDEX -		
REACH Reg. 01-2119638275-36-0000		
Linalool		
CAS 78-70-6	$0,15 \le x < 0,2$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317

H317

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EC 201-134-4

INDEX 603-235-00-2

REACH Reg. 01-2119474016-42-0000

1,6-Nonadien-3-OI, 3,7-Dimethyl-

CAS 10339-55-6

 $0,15 \le x < 0,2$

Eye Irrit. 2 H319, Skin Sens. 1B H317

EC 233-732-6

INDEX -

REACH Reg. 01-2119969272-32

Benzenepropanal, 4-Methoxy-.Alpha.-Methyl-

CAS 5462-06-6

 $0,15 \le x < 0,2$

Skin Sens. 1B H317

EC 226-749-5

INDEX -

REACH Reg. 01-2120629103-67

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

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHĂLATION: 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

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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 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:

FRA France Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS

GBR United Kingdom EH40/2005 Workplace exposure limits (Fourth Edition 2020)

TLV-ACGIH ACGIH 2021

ETHANOL							
Threshold Limit Value							
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
VLEP	FRA	1900	1000	9500	5000		
WEL	GBR	1920	1000				
TLV-ACGIH				1884	1000		
Predicted no-effect concentrati	ion - PNEC						

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Normal value in fresh water				0,96	mg	n/l		
Normal value in marine water	•			0,79	mg			
Normal value for fresh water				3,6		g/i g/kg/d		
Normal value for marine wate				2,9		g/kg/d		
Normal value for water, intern				2,75	mg	g/l		
Normal value of STP microorg				580	mç	g/l		
Health - Derived no-effective n	ct level - DNEL / I Effects on consumers	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				950 mg/m3		1884 mg/m3		
Skin								343 mg/kg/d
Linalyl acetate Predicted no-effect concentra	ition - PNFC							
Normal value in fresh water				0,011	mç	1/1		
Normal value in marine water	•			0,0011	mg			
Normal value for fresh water								
				0,609		g/kg/d		
Normal value for marine wate				0,0609		g/kg/d		
Normal value of STP microorg				1	mç	-		
Normal value for the terrestria	·			0,115	mç	g/kg/d		
Health - Derived no-effect	ct level - DNEL / [Effects on consumers	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,200 mg/kg bw/d				
Inhalation				0,680 mg/m3				2,75 mg/m3
Skin				1,25 mg/kg bw/d				2,5 mg/kg bw/d
Oxacyclohexadecen-2-C								
Predicted no-effect concentra	tion - PNEC							
Normal value in fresh water				0,0027	mg	g/l		
Normal value in marine water				270	ng	/L		
Normal value for fresh water s	sediment			21	mç	g/kg/d		
Normal value for marine water	r sediment			4,2	mg	g/kg/d		
Normal value of STP microorg	ganisms			10	mç	g/l		
Normal value for the terrestria	al compartment			5,44	mç	g/kg/d		
2-Phenylmethyleneoctai Predicted no-effect concentra	nal							
Normal value in fresh water				0,00126	mç	1/1		
Normal value in marine water				126	ng			
Normal value for fresh water								
				3,2		g/kg/d		
Normal value for marine wate				0,064		g/kg/d		
Normal value for water, intern	nittent release			0,00247	mç	g/l		

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Normal value of STP micro	organisms			10	mg	/I		
Normal value for the terrest	rial compartment			0,398	mg	/kg/d		
Health - Derived no-eff	Effects on	MEL			Effects on			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	workers Acute local	Acute	Chronic local	Chronic
Oral				0,056 mg/kg		systemic		systemic
Inhalation			4,71 mg/m3	0,019 mg/m3				0,078 mg/m
Skin			0,0787 mg/cm2	9,11 mg/kg bw/d			0,525 mg/cm2	18,2 mg/kg bw/d
Benzenepropanal, 4-M Predicted no-effect concent	ethoxyAlphaMeth	ıyl-						
Normal value in fresh water				0,0052	mg	/1		
Normal value in marine wat				520	ng/			
Normal value for fresh wate				0,104		/kg/d		
Normal value for marine wa				0,0104		/kg/d /kg/d		
Normal value of STP micros				3				
Health - Derived no-eff	_	MEI		J	mg	/1 		
nealth - Derived no-en	Effects on consumers	VIEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,08 mg/kg		Officialio		3,00011110
Inhalation				1,88 mg/m3				6,35 mg/m3
Skin			3,992 mg/cm2	1,08 mg/kg bw/d			3,992 mg/cm2	1,8 mg/kg bw/d
							J	
1,6-Nonadien-3-OI, 3,7- Predicted no-effect concent	-Dimethyl-							
Normal value in fresh water				0,023		./1		
Normal value in marine water				-	mg			
Normal value for fresh wate	ei .					/ I		
Normal value for fresh water	r andimont			0,0023	mg			
Niama al calca fan as ada a con				0,223	mg	/kg/d		
Normal value for marine wa	iter sediment			0,223	mg	/kg/d /kg/d		
Normal value of STP microo	nter sediment organisms			0,223 0,0223 10	mg mg	/kg/d /kg/d /l		
Normal value of STP microo	organisms rial compartment			0,223	mg mg	/kg/d /kg/d		
Normal value of STP microo	organisms rial compartment fect level - DNEL / DI Effects on	MEL		0,223 0,0223 10	mg mg mg	/kg/d /kg/d /l		
Normal value of STP microo Normal value for the terrest Health - Derived no-eff	organisms rial compartment	MEL Acute systemic	Chronic local	0,223 0,0223 10 0,031	mg mg mg	/kg/d /kg/d /l /kg/d	Chronic local	Chronic
Normal value of STP microon Normal value for the terrest Health - Derived no-eff Route of exposure	organisms rial compartment fect level - DNEL / DI Effects on consumers		Chronic local	0,223 0,0223 10 0,031 Chronic systemic 0,200	mg mg mg mg mg wg	/kg/d /kg/d /l /kg/d	Chronic local	Chronic systemic
Normal value of STP microo Normal value for the terrest Health - Derived no-eff Route of exposure	organisms rial compartment fect level - DNEL / DI Effects on consumers		Chronic local	0,223 0,0223 10 0,031 Chronic systemic	mg mg mg mg mg wg	/kg/d /kg/d /l /kg/d	Chronic local	
Normal value of STP microon Normal value for the terrest Health - Derived no-eff Route of exposure Oral Inhalation	organisms rial compartment fect level - DNEL / DI Effects on consumers		Chronic local	0,223 0,0223 10 0,031 Chronic systemic 0,200 mg/kg/d 0,740 mg/m3	mg mg mg mg mg wg	/kg/d /kg/d /l /kg/d	Chronic local	systemic 3 mg/m3
Normal value of STP microon Normal value for the terrest Health - Derived no-eff Route of exposure Oral Inhalation	organisms rial compartment fect level - DNEL / DI Effects on consumers		Chronic local	0,223 0,0223 10 0,031 Chronic systemic 0,200 mg/kg/d	mg mg mg mg mg wg	/kg/d /kg/d /l /kg/d	Chronic local	systemic
Normal value of STP microo Normal value for the terrest Health - Derived no-eff Route of exposure Oral Inhalation Skin Linalool	organisms rial compartment fect level - DNEL / DI Effects on consumers Acute local		Chronic local	0,223 0,0223 10 0,031 Chronic systemic 0,200 mg/kg/d 0,740 mg/m3 1,4 mg/kg	mg mg mg mg mg wg	/kg/d /kg/d /l /kg/d	Chronic local	systemic 3 mg/m3 2,7 mg/kg
Normal value of STP micror Normal value for the terrest Health - Derived no-eff Route of exposure Oral Inhalation Skin Linalool Predicted no-effect concent	organisms rial compartment fect level - DNEL / DI Effects on consumers Acute local		Chronic local	0,223 0,0223 10 0,031 Chronic systemic 0,200 mg/kg/d 0,740 mg/m3 1,4 mg/kg bw/d	mg mg mg mg mg wg	/kg/d /kg/d /l /kg/d	Chronic local	systemic 3 mg/m3 2,7 mg/kg
Normal value of STP micror Normal value for the terrest Health - Derived no-eff Route of exposure Oral Inhalation Skin Linalool Predicted no-effect concent	organisms rial compartment fect level - DNEL / DI Effects on consumers Acute local		Chronic local	0,223 0,0223 10 0,031 Chronic systemic 0,200 mg/kg/d 0,740 mg/m3 1,4 mg/kg bw/d 0,2	mg mg mg mg mg wg	/kg/d /kg/d //I /kg/d Acute systemic	Chronic local	systemic 3 mg/m3 2,7 mg/kg
Normal value of STP microo	organisms rial compartment fect level - DNEL / DI Effects on consumers Acute local		Chronic local	0,223 0,0223 10 0,031 Chronic systemic 0,200 mg/kg/d 0,740 mg/m3 1,4 mg/kg bw/d	mg mg mg mg mg Effects on workers Acute local	/kg/d /kg/d //I //kg/d Acute systemic	Chronic local	systemic 3 mg/m3 2,7 mg/kg

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	er sediment			0,222	mg	ı/kg/d		
Normal value of STP microorg	ganisms			10	mg	ı/I		
Normal value for the terrestria	al compartment	-		0,327	mg	ı/kg/d		
Health - Derived no-effe	ct level - DNEL / D Effects on consumers	MEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				2,49 mg/kg bw/d		0,0.00		бускоппо
Inhalation				4,33 mg/m3				24,58 mg/r
Skin			1,5 mg/cm2	1,25 mg/kg bw/d				3,5 mg/kg bw/d
Hexyl salicylate Predicted no-effect concentra	tion - PNEC							
Normal value in fresh water	tion - i NEC			357	ng/	<u>'</u>		
Normal value in marine water				35,7	ng/			
Normal value for fresh water s				0,272		ı/kg/d		
Normal value for marine water				27,2		/kg/d /kg/d		
Normal value for water, interm				0,00357	mg			
Normal value of STP microorg				10	mg			
Normal value for the terrestria	-			0,0542		/kg/d		
Health - Derived no-effec	·	MEL		-,,	Effects on workers	3.		
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic
Oral				systemic 0,3 mg/kg		systemic		systemic
Inhalation				0,4 mg/m3				1,7 mg/m3
Skin				3,2 mg/kg bw/d				6,4 mg/kg bw/d
Ethanone, 1- (1,2,3,4,5,6	.7.8-Octahydro-2.	3.8.8-Tetramethy	/I-2-Naphtalen	vI) -				
Predicted no-effect concentra		<u> </u>	1 2 Hapittaion	, , ,				
Normal value in fresh water				0,0044	mg	ı/I		
					ng/	′L		
Normal value in marine water				440	9			
				3,73		/kg/d		
Normal value for fresh water s	sediment				mg	ı/kg/d ı/kg/d		
Normal value in marine water Normal value for fresh water s Normal value for marine wate Normal value of STP microors	sediment er sediment			3,73	mg	/kg/d		
Normal value for fresh water s	sediment or sediment ganisms			3,73 0,75	mg mg	/kg/d		
Normal value for fresh water s Normal value for marine wate Normal value of STP microors Normal value for the terrestria	sediment or sediment ganisms al compartment ct level - DNEL / E Effects on)MEL		3,73 0,75 10	mg mg mg	ı/kg/d ı/l		
Normal value for fresh water s Normal value for marine wate Normal value of STP microors Normal value for the terrestria Health - Derived no-effect	sediment or sediment ganisms al compartment ct level - DNEL / I	DMEL Acute systemic	Chronic local	3,73 0,75 10 2,7	mg mg mg	//kg/d //l //kg/d Acute	Chronic local	Chronic
Normal value for fresh water so Normal value for marine water so Normal value of STP microors of Normal value for the terrestriate Health - Derived no-effect Route of exposure	sediment or sediment ganisms al compartment ct level - DNEL / C Effects on consumers		Chronic local	3,73 0,75 10 2,7	mg mg mg	//kg/d //i //kg/d	Chronic local	Chronic systemic 30 mg/m3
Normal value for fresh water so Normal value for marine water so Normal value of STP microors Normal value for the terrestriate Health - Derived no-effect Route of exposure	sediment or sediment ganisms al compartment ct level - DNEL / C Effects on consumers		Chronic local	3,73 0,75 10 2,7 Chronic systemic	mg mg mg	//kg/d //l //kg/d Acute	Chronic local	systemic 30 mg/m3
Normal value for fresh water s Normal value for marine wate Normal value of STP microors	sediment or sediment ganisms al compartment ct level - DNEL / E Effects on consumers Acute local		Chronic local	3,73 0,75 10 2,7 Chronic systemic 9 mg/m3 17,2 mg/kg	mg mg mg	//kg/d //l //kg/d Acute	Chronic local	systemic 30 mg/m3 28,7 mg/kg

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Normal value in marine water	400	ng/L	
Normal value for fresh water sediment	0,528	mg/kg/d	
Normal value for marine water sediment	0,0528	mg/kg/d	
Normal value for water, intermittent release	0,024	mg/l	·
Normal value of STP microorganisms	10	mg/l	
Normal value for the terrestrial compartment	0.103	ma/ka/d	

Health - Derived no-ef	fect level - DNEL / [OMEL						
	Effects on				Effects on			
	consumers				workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,0625 mg/kg bw/d				
Inhalation				0,110 mg/m3				0,440 mg/m3
Skin				0,890 mg/kg bw/d				1,79 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.

8.2. Exposure controls

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

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category 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 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear opencircuit 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.

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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	clear liquid	Concentration: 100 % Temperature: 20 °C
Colour	colourless	Concentration: 100 % Temperature: 20 °C
Odour	characteristic	Concentration: 100 % Temperature: 20 °C
Odour threshold	Not applicable	
Melting point / freezing point	Not available	
Initial boiling point Flammability	80 °C flammable liquid	Concentration: 100 %
Lower explosive limit	3,5 % (v/v)	
Upper explosive limit	15 % (v/v)	
Flash point Auto-ignition temperature pH	< 23 °C 430 °C 7	Concentration: 100 % Concentration: 100 % Concentration: 100 % Temperature: 20 °C
Kinematic viscosity	Not available	
Solubility	partially soluble in water	Concentration: 100 % Temperature: 20 °C
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density	0,82 - 0,84 g/cm ³	Concentration: 100 % Temperature: 20 °C
Relative vapour density	Not available	
Particle characteristics	Not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2010/75/EU)
88,84 % - 740,86 g/litre Concentration: 100 %
VOC (volatile carbon)
46,34 % - 384,62 g/litre Concentration: 100 %
Concentration: 100 %
Concentration: 100 %
Temperature: 20 °C

SECTION 10. Stability and reactivity

10.1. Reactivity

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

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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.

ETHANOI

Risk of explosion on contact with: alkaline metals,alkaline oxides,calcium hypochlorite,sulphur monofluoride,acetic anhydride,acids,concentrated hydrogen peroxide,perchlorates,perchloric acid,perchloronitrile,mercury nitrate,nitric acid,silver,silver nitrate,ammonia,silver oxide,ammonia,strong oxidising agents,nitrogen dioxide. May react dangerously with: bromoacetylene,chlorine acetylene,bromine trifluoride,chromium trioxide,chromyl chloride,fluorine,potassium tert-butoxide,lithium hydride,phosphorus trioxide,black platinum,zirconium (IV) chloride,zirconium (IV) iodide. Forms explosive mixtures with: air.

10.4. Conditions to avoid

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

ETHANOL

Avoid exposure to: sources of heat,naked flames.

10.5. Incompatible materials

Information not available.

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.

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

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

ATE (Oral) of the mixture:

Not classified (no significant component)

Not classified (no significant component)

ATE (Dermal) of the mixture:

Not classified (no significant component)

ETHANOL

LD50 (Oral): > 5000 mg/kg Rat

LC50 (Inhalation vapours): 120 mg/l/4h Pimephales promelas

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Linalyl acetate

LD50 (Oral): 9000 mg/kg Rat LD50 (Dermal): 5000 mg/kg Rabbit

2-Phenylmethyleneoctanal

3100 mg/kg Rat LD50 (Oral): LD50 (Dermal): 3000 mg/kg Rabbit

Benzenepropanal, 4-Methoxy-. Alpha.-Methyl-

LD50 (Oral): > 4000 mg/kg Rat LD50 (Dermal): 5000 mg/kg Rabbit

1,6-Nonadien-3-OI, 3,7-Dimethyl-

LD50 (Oral): 5283 mg/kg Mouse LD50 (Dermal): 5000 mg/kg Rabbit

Linalool

LD50 (Oral): 2790 mg/kg Rat LD50 (Dermal): 5610 mg/kg Rabbit

Hexyl salicylate

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

Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphtalenyl) -LD50 (Oral): 5000 mg/kg Rat LD50 (Dermal): 5000 mg/kg Rat

Butylphenyl methylpropional

STA (Oral): 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP

(figure used for calculation of the acute toxicity estimate of the mixture)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains: Hexyl salicylate Linalool

Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphtalenyl) -

Butylphenyl methylpropional

Benzenepropanal, 4-Methoxy-.Alpha.-Methyl-

1,6-Nonadien-3-OI, 3,7-Dimethyl-(R)-P-MENTHA-1,8-DIENE

Linalyl acetate

2-Phenylmethyleneoctanal 3-Octanol, 3,7-Dimethyl-

Respiratory sensitization

Information not available.

Skin sensitization

Information not available.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

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CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

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

SECTION 12. Ecological information

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

12.1. Toxicity

(R)-P-MENTHA-1,8-DIENE

LC50 - for Fish 35 mg/l/96h Oncorhynchus mykiss EC50 - for Crustacea 69,6 mg/l/48h Daphnia pulex

Hexyl salicylate

0,95 mg/l/96h LC50 - for Fish 0,357 mg/l/48h EC50 - for Crustacea EC50 - for Algae / Aquatic Plants 0,61 mg/l/72h

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Linalool

 LC50 - for Fish
 27,8 mg/l/96h

 EC50 - for Crustacea
 59 mg/l/48h

 EC10 for Algae / Aquatic Plants
 54,3 mg/l/4d

Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-Tetramethyl-2-Naphtalenyl) -

LC50 - for Fish

Chronic NOEC for Fish

Chronic NOEC for Crustacea

Chronic NOEC for Algae / Aquatic Plants

1,3 mg/l/96h

> 0,16 mg/l 30 days

> 0,028 mg/l 21 days

2,6 mg/l freshwater algae

Linalyl acetate

 LC50 - for Fish
 11 mg/l/96h

 EC50 - for Crustacea
 59 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 68 mg/l/72h

Butylphenyl methylpropional

 EC50 - for Crustacea
 10,7 mg/l/48h

 EC10 for Algae / Aquatic Plants
 1,696 mg/l/72h

 Chronic NOEC for Fish
 > 0,0195 mg/l 21 days

Benzenepropanal, 4-Methoxy-.Alpha.-

Methyl-

 LC50 - for Fish
 5,2 mg/l/96h

 EC50 - for Crustacea
 12 mg/l/48h

 EC10 for Algae / Aquatic Plants
 6,3 mg/l Algae

2-Phenylmethyleneoctanal

1,6-Nonadien-3-OI, 3,7-Dimethyl-

 LC50 - for Fish
 24 mg/l/96h

 EC50 - for Crustacea
 23 mg/l/48h

EC50 - for Algae / Aquatic Plants 25,1 mg/l/72h freshwater algae
Chronic NOEC for Algae / Aquatic Plants 6,3 mg/l freshwater algae

12.2. Persistence and degradability

(R)-P-MENTHA-1,8-DIENE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

ETHANOL

Solubility in water 1000 - 10000 mg/l

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Rapidly degradable

Hexyl salicylate

Solubility in water 2 mg/l

Rapidly degradable

Linalool

Solubility in water 1,56 g/l

Rapidly degradable

Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-

2,3,8,8-Tetramethyl-2-Naphtalenyl) -

Solubility in water 2,68 mg/l

Rapidly degradable

Linalyl acetate

Solubility in water 30 mg/l

Rapidly degradable

Butylphenyl methylpropional

Solubility in water 33 mg/l @ 20°C

Rapidly degradable

Benzenepropanal, 4-Methoxy-.Alpha.-

Methyl-

Solubility in water 1,086 g/l @ 24°C

Rapidly degradable

2-Phenylmethyleneoctanal

Solubility in water 1,62 mg/l

Rapidly degradable

1,6-Nonadien-3-OI, 3,7-Dimethyl-

Solubility in water 656 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

(R)-P-MENTHA-1,8-DIENE

Partition coefficient: n-octanol/water 4,38 BCF 1022

ETHANOL

Partition coefficient: n-octanol/water -0,35

Hexyl salicylate

Partition coefficient: n-octanol/water 5,5 Log Kow

Linalool

Partition coefficient: n-octanol/water 2,9 Log Kow @ 20°C

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Ethanone, 1- (1,2,3,4,5,6,7,8-Octahydro-

2,3,8,8-Tetramethyl-2-Naphtalenyl) -

Partition coefficient: n-octanol/water 5,65 Log Kow BCF 5361 L/kg ww

Linalyl acetate

Partition coefficient: n-octanol/water 3,9 Log Kow BCF 174 L/kg ww

Butylphenyl methylpropional

Partition coefficient: n-octanol/water 4,2 Log Kow

Benzenepropanal, 4-Methoxy-.Alpha.-

Methyl-

Partition coefficient: n-octanol/water 2,3 Log Kow @ 25°C

BCF 18 L/kg ww aquatic/sediment

2-Phenylmethyleneoctanal

Partition coefficient: n-octanol/water 5,3 Log Kow

1,6-Nonadien-3-OI, 3,7-Dimethyl-

Partition coefficient: n-octanol/water 3,3 Log Kow

12.4. Mobility in soil

Information not available.

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

Information not available.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1266

14.2. Designazione ufficiale ONU di trasporto

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ADR / RID: PRODOTTI PER PROFUMERIA
IMDG: PERFUMERY PRODUCTS
IATA: PERFUMERY PRODUCTS

14.3. Classi di pericolo connesso al trasporto

ADR / RID: Classe: 3 Etichetta: 3

IMDG: Classe: 3 Etichetta: 3

IATA: Classe: 3 Etichetta: 3



14.4. Gruppo d'imballaggio

ADR / RID, IMDG, IATA: II

14.5. Pericoli per l'ambiente

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Precauzioni speciali per gli utilizzatori

ADR / RID: HIN - Kemler: 33 Quantità Limitate: 5 L Codice di restrizione in

galleria: (D/E)

Disposizione speciale: 163, 640D

IMDG: EMS: F-E, S-D Quantità Limitate: 5 L

IATA: Cargo: Quantità massima: 60 L Istruzioni Imballo: 364
Pass.: Quantità massima: 5 L Istruzioni Imballo: 353

Disposizione speciale: A3, A72

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

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

Product

Point 3 - 40

Contained substance

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Point 75

Point 30 Butylphenyl methylpropional REACH Reg.: 01-2119485965-18-0000

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

Not applicable

Substances in Candidate List (Art. 59 REACH)

Butylphenyl methylpropional

REACH Reg.: 01-2119485965-18-0000

Substances subject to authorisation (Annex XIV REACH)

None

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

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

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

15.2. Chemical safety assessment

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

SECTION 16. Other information

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

Flam. Liq. 2 Flammable liquid, category 2

Repr. 1B Reproductive toxicity, category 1B

Acute Tox. 4 Acute toxicity, category 4

Asp. Tox. 1 Aspiration hazard, category 1

Eye Irrit. 2 Eye irritation, category 2

Skin Irrit. 2 Skin irritation, category 2

Skin Sens. 1 Skin sensitization, category 1

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1

Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1

Aquatic Chronic 3 Hazardous to the aquatic environment, chronic toxicity, category 3

H225 Highly flammable liquid and vapour.H360 May damage fertility or the unborn child.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

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H315 Causes skin irritation

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

LEGEND:

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

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 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 (EÚ) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP) 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
 The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
 Patty Industrial Hygiene and Toxicology

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- 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

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: 01 / 02 / 03 / 04 / 08 / 09 / 11 / 12 / 14 / 15 / 16.	