Safety data sheet

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

1.1. Product identifier

Code: **YS---M305/-----**
Product name **HYDRO-OIL FOR OUTDOOR FURNITURES NATURAL EFFECT**

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

Intended use **FURNITURE OIL**

1.3. Details of the supplier of the safety data sheet

Name **RENNER ITALIA S.p.A.**
Full address **Via Ronchi Inferiore, 34**
District and Country **40061 Minerbio BO**
Italia
Tel. +39 051-6618211
Fax +39 051-6606312

e-mail address of the competent person responsible for the Safety Data Sheet **sds@renneritalia.com**

Product distribution by:

1.4. Emergency telephone number

For urgent inquiries refer to **RENNER ITALIA S.p.A. - Tel. +39 051-6618211 (dal lunedì al venerdì dalle 8.30 - 13.00 e dalle 14.00 - 17.30)**
ITALIA
Centro antiveleni Milano - Tel. +39 02-66101029
Centro antiveleni Firenze - Tel. +39 055-7947819
CROATIA
Služba za izvanredna stanja (112)
Centar za kontrolu otrovanja (01/2348-342)
HUNGARY
Egészségügyi Toxikológiai Tájékoztató Szolgálat (ETTSZ)
1096 Budapest, Nagyvárad tér 2.
Telefon: +36 1 476 6464 (8-16 óráig), +36 80 201 199 (éjjel-nappal hívható) magyar nyelven
LATVIA
Valsts ugunsdzesibas un glabšanas dienests: (+371) 112
Saindešanas un zalu informacijas centrs: (+371) 67042473 (visu diennakti)
LITHUANIA
Apsinuodijimų kontrolės ir Informacijos biuras visą parą tel. (8 5) 236 2052
Bendras pagalbos telefonas: 112
NORWAY
Emergency number: 113
POLSKA
Numer telefonu alarmowego: +48 22 615 27 51
PORTUGAL
Centro de Informação Anti-Venenos: +351 808 250 143
BULGARIA - България
Национален център по токсикология, МБАЛСМ "Пирогов"
телефон: +359 2 9154 233

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 EC Regulation 1907/2006 and subsequent amendments.

SECTION 2. Hazards identification ... / >>

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:

Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful 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: --

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

EUH208 Contains: Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one
methyl- 2H- isothiazol- 3-one (3:1)
1,2-Benzisothiazol-3(2H)-one
3- Iodo- 2-propynyl- N- butylcarbamate
May produce an allergic reaction.

Precautionary statements:

P273 Avoid release to the environment.

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification	**x = Conc. %**	**Classification 1272/2008 (CLP)**
3- Iodo- 2-propynyl- N- butylcarbamate		
CAS 55406-53-6	0,5 <= x < 1	Acute Tox. 3 H331, Acute Tox. 4 H302, STOT RE 1 H372, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1
EC 259-627-5		
INDEX 616-212-00-7		
Reg. no.		
2-BUTOXYETHANOL		
CAS 111-76-2	0,5 <= x < 1	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC 203-905-0		
INDEX 603-014-00-0		
Reg. no. 01-2119475108-36-xxxx		
TRIETHYLAMINE		
CAS 121-44-8	0,25 <= x < 0,5	Flam. Liq. 2 H225, Acute Tox. 3 H311, Acute Tox. 3 H331, Acute Tox. 4 H302, Skin Corr. 1A H314, STOT SE 3 H335
EC 204-469-4		
INDEX 612-004-00-5		
Reg. no. 01-2119475467-26-xxxx		
1,2-Benzisothiazol-3(2H)-one		
CAS 2634-33-5	0 <= x < 0,05	Acute Tox. 2 H330, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411
EC 220-120-9		
INDEX 613-088-00-6		
Reg. no. 01-2120761540-60		

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

Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one
methyl- 2H- isothiazol- 3-one (3:1)
CAS *55965-84-9* 0 <= x < 0,0015 Acute Tox. 2 H310, Acute Tox. 2 H330, Acute Tox. 3 H301, Skin Corr. 1B H314, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=10
EC
INDEX *613-167-00-5*
Reg. no. *01-2120764691-48-xxxx*

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

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

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

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.
UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters

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

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

SECTION 6. Accidental release measures ... / >>

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. If the product is flammable, use explosion-proof equipment. 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

Store in a well ventilated place, keeping the containers closed when not used. Do not smoke while handling.

7.1. Precautions for safe handling

Information not available

7.2. Conditions for safe storage, including any incompatibilities

Information not available

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

BGR	България	МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г
CZE	Česká Republika	Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
DNK	Danmark	Graensevaerdier per stoffer og materialer
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
EST	Eesti	Töökeskkonna keemiliste ohutegurite piirnormid 1. Vastu võetud 18.09.2001 nr 293 RT I 2001, 77, 460 - Redaktsiooni jõustumise kp: 01.01.2008
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
HRV	Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
HUN	Magyarország	50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
LTU	Lietuva	DĖL LIETUVOS HIGIENOS NORMOS HN 23:2007 CHEMINIŲ MEDŽIAGŲ 2007 m. spalio 15 d. Nr. V-827/A1-287
LVA	Latvija	Ķīmisko vielu aroda ekspozīcijas robežvērtības (AER) darba vides gaisā 2012
NLD	Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18
NOR	Norge	Veiledning om Administrative normer for forurensning i arbeidsatmosfære
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diaro da Republica I 26; 2012-02-06
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 20. júna 2007
SVN	Slovenija	Uradni list Republike Slovenije 15. 6. 2007
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
TUR	Türkiye	2000/39/EC sayılı Direktifin ekidir
EU	OEL EU	Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2016

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

AMORPHOUS SILICATE HYDRATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	4				INHAL
MAK	DEU	4				INHAL
TLV	DNK	2				INHAL
TLV	EST	2				
RV	LVA	1				
MV	SVN	4				INHAL

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation								4 mg/m3

3- Iodo- 2-propynyl- N- butylcarbamate

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,001	mg/l
Normal value in marine water	0,0001	mg/l
Normal value for fresh water sediment	0,017	mg/kg
Normal value for marine water sediment	0,002	mg/kg
Normal value of STP microorganisms	0,44	mg/l
Normal value for the food chain (secondary poisoning)	NEA	
Normal value for the terrestrial compartment	0,005	mg/kg
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	NPI	NPI	NPI	NPI				
Inhalation	NPI	NPI	NPI	NPI	1,16 mg/m3	0,07 mg/m3	1,16 mg/m3	0,23 mg/m3
Skin					NPI	NPI	NPI	2 mg/kg bw/d

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

2-BUTOXYETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	98		246		SKIN
TLV	CZE	100		200		SKIN
AGW	DEU	49	10	196	40	SKIN
MAK	DEU	49	10	98	20	SKIN
TLV	DNK	98	20			SKIN
VLA	ESP	98	20	245	50	SKIN
TLV	EST	98	20	246	50	SKIN
VLEP	FRA	49	10	246	50	SKIN
WEL	GBR	123	25	246	50	SKIN
TLV	GRC	120	25			
GVI	HRV	98	20	246	50	SKIN
AK	HUN	98		246		
VLEP	ITA	98	20	246	50	SKIN
RD	LTU	50	10	100	20	SKIN
RV	LVA	98	20	246	50	SKIN
OEL	NLD	100		246		SKIN
TLV	NOR	50	10			SKIN
NDS	POL	98		200		
VLE	PRT	98	20	246	50	SKIN
NPHV	SVK	98	20	246		SKIN
MV	SVN	98	20			SKIN
MAK	SWE	50	10	100	20	SKIN
ESD	TUR	98	20	246	50	SKIN
OEL	EU	98	20	246	50	SKIN
TLV-ACGIH		97	20			

Predicted no-effect concentration - PNEC

Normal value in fresh water	8,8	mg/l
Normal value in marine water	0,88	mg/l
Normal value for fresh water sediment	34,6	mg/kg
Normal value for marine water sediment	3,46	mg/kg
Normal value for water, intermittent release	9,1	mg/l
Normal value of STP microorganisms	463	mg/l
Normal value for the food chain (secondary poisoning)	20	mg/kg
Normal value for the terrestrial compartment	2,33	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	26,7 mg/kg/d	VND	6,3 mg/kg/d				
Inhalation	426 mg/m3	147 mg/m3	VND	59 mg/m3	246 mg/m3	1091 mg/m3	VND	98 mg/m3
Skin	VND	89 mg/kg/d	VND	75 mg/kg/d	VND	89 mg/kg/d	VND	125 mg/kg/d

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

TRIETHYLAMINE

Threshold Limit Value

Type	Country	TWA/8h mg/m3	TWA/8h ppm	STEL/15min mg/m3	STEL/15min ppm	
TLV	BGR	8,4		12,6		SKIN
TLV	CZE	8		12		SKIN
AGW	DEU	4,2	1	8,4	2	SKIN
MAK	DEU	4,2	1	8,4	2	
TLV	DNK	4,1	1			
VLA	ESP	8,4	2	12,6	3	SKIN
TLV	EST	8,4	2	12,6	3	SKIN
VLEP	FRA	4,2	1	12,6	3	SKIN
WEL	GBR	8	2	17	4	SKIN
TLV	GRC	40	10	60	15	
GVI	HRV	8,4	2	12,6	3	SKIN
AK	HUN	8,4		12,6		
VLEP	ITA	8,4	2	12,6	3	SKIN
RD	LTU	8,4	2	12,6	3	SKIN
RV	LVA	8,4	2	12,6	3	
OEL	NLD	4,2		12,6		SKIN
TLV	NOR	8	2			SKIN
NDS	POL	3		9		
VLE	PRT	8,4	2	12,6	3	SKIN
NPHV	SVK	8,4	2	12,6		
MV	SVN	8,4	2			SKIN
MAK	SWE	8	2	40	10	
ESD	TUR	8,4	2	12,6	3	SKIN
OEL	EU	8,4	2	12,6	3	SKIN
TLV-ACGIH		2,1	0,5	4,2	1	SKIN

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,11	mg/l
Normal value in marine water	0,011	mg/l
Normal value for fresh water sediment	1,575	mg/kg
Normal value for marine water sediment	0,158	mg/kg
Normal value for water, intermittent release	0,08	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	0,25	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					12,6 mg/m3	12,6 mg/m3	8,4 mg/m3	8,4 mg/m3
Skin								12,1 mg/kg/d

1,2-Benzisothiazol-3(2H)-one

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,00403	mg/l
Normal value in marine water	0,000403	mg/l
Normal value for fresh water sediment	0,0499	
Normal value for marine water sediment	0,00499	mg/kg/d
Normal value for water, intermittent release	0,00011	mg/kg/d mg/l
Normal value of STP microorganisms	1,03	mg/l
Normal value for the terrestrial compartment	3	

Health - Derived no-effect level - DNEL / DMEL

mg/kg/d

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				1,2 mg/m3				6,81 mg/m3
Skin				0,345				0,966

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

					mg/kg bw/d				mg/kg bw/d

Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one
methyl- 2H- isothiazol- 3-one (3:1)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	0,2				INHAL	
MV	SVN	0,05					

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,00339	mg/l
Normal value in marine water	0,00339	mg/l
Normal value for water, intermittent release	0,00339	mg/l
Normal value of STP microorganisms	0,23	mg/l

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		0,11 mg/kg bw/d		0,09 mg/kg bw/d				
Inhalation	0,02 mg/m3		0,04 mg/m3		0,04 mg/m3		0,02 mg/m3	

Legend:
(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

Take the normal precautions for handling chemicals and apply an adequate standard of workplace hygiene.
Users must assess the risks in their workplace and adopt:
- Primary collective protective measures such as adequate natural ventilation and local extraction
- Personal protective equipment to manage the combination of residual risks
Personal protective equipment varies according to the possible exposure and hazardousness of the working conditions, so the final choice depends on the risk assessment.

HAND PROTECTION
Use category III chemical resistant gloves according to the EN 374 standard
Brief contact (splash protection) – non-exhaustive list
Suitable material: NITRILE RUBBER (NBR)
Glove thickness: greater than 0.4 mm
Breakthrough time: from 30 to 60 minutes
Breakthrough index: at least 2
The gloves must be replaced if there are signs of deterioration. In any case, users must assess the risks to determine the most suitable type of glove for the conditions of use.

SKIN PROTECTION
Wear work clothes and safety footwear that complies with EN ISO 20344

EYE PROTECTION
Wear safety glasses (EN 166).

RESPIRATORY PROTECTION
Use a mask with EN140 and/or EN136 approval, with an ABEK type filter (EN 14387)
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

NOTE: Determination of the flash point may be NA (not applicable), the product being non flammable.

9.1. Information on basic physical and chemical properties

Appearance		viscous liquid
Colour		milky
Odour		Typical
Odour threshold		Not available
pH		Not available
Melting point / freezing point		Not available
Initial boiling point	>	65 °C
Boiling range		Not available
Flash point		Not applicable
Evaporation speed		Not available
Flammability (solid, gas)		not applicable
Lower inflammability limit		Not available
Upper inflammability limit		Not available
Lower explosive limit		Not available
Upper explosive limit		Not available
Vapour pressure		Not available
Vapour density		Not available
Relative density		1,04
Solubility		soluble in water
Partition coefficient: n-octanol/water		Not available
Auto-ignition temperature		Not available
Decomposition temperature		Not available
Viscosity		Not available
Explosive properties		not applicable
Oxidising properties		not applicable

9.2. Other information

Total solids (250°C / 482°F)		26,21 %		
VOC (Directive 2010/75/EC) :		1,50 %	- 15,59	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-BUTOXYETHANOL
Decomposes under the effect of heat.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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

2-BUTOXYETHANOL
May react dangerously with: aluminium, oxidising agents. Forms peroxides with: air.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

2-BUTOXYETHANOL
Avoid exposure to: sources of heat, naked flames.

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

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

2-BUTOXYETHANOL
May develop: hydrogen.

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 toxicological effects

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

LC50 (Inhalation - vapours) of the mixture:	> 20 mg/l
LC50 (Inhalation - mists / powders) of the mixture:	> 5 mg/l
LD50 (Oral) of the mixture:	Not classified (no significant component)
LD50 (Dermal) of the mixture:	>2000 mg/kg

AMORPHOUS SILICATE HYDRATE

LD50 (Oral)	> 2000 mg/kg Rat
LD50 (Dermal)	> 2000 mg/kg Rat
LC50 (Inhalation)	> 0,69 mg/l/4h

2-BUTOXYETHANOL

LD50 (Oral)	1300 mg/kg
LD50 (Dermal)	2000 mg/kg
LC50 (Inhalation)	11 mg/l/4h

TRIETHYLAMINE

LD50 (Oral)	460 mg/kg
LD50 (Dermal)	400 mg/kg
LC50 (Inhalation)	7,2 mg/l/4h

1,2-Benzisothiazol-3(2H)-one

LD50 (Oral)	490 mg/kg
LD50 (Dermal)	> 2000 mg/kg

Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one
methyl- 2H- isothiazol- 3-one (3:1)

LD50 (Oral)	66 mg/kg
LD50 (Dermal)	141 mg/kg
LC50 (Inhalation)	0,17 mg/l/4h

SECTION 11. Toxicological information ... / >>

3- Iodo- 2-propynyl- N- butylcarbamate

LD50 (Oral)	1056 mg/kg
LD50 (Dermal)	> 2000 mg/kg
LC50 (Inhalation)	0,763 mg/l/4h

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.
Contains:
Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one
methyl- 2H- isothiazol- 3-one (3:1)
1,2-Benzisothiazol-3(2H)-one
3- Iodo- 2-propynyl- N- butylcarbamate

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

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

AMORPHOUS SILICATE HYDRATE

LC50 - for Fish	> 10000 mg/l/96h Brachydanio rerio - Fish

2-BUTOXYETHANOL

LC50 - for Fish	1474 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	1550 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	1840 mg/l/72h Pseudokirchneriella subcapitata
Chronic NOEC for Fish	> 100 mg/l Brachydanio rerio
Chronic NOEC for Crustacea	100 mg/l Daphnia magna

SECTION 12. Ecological information ... / >>

TRIETHYLAMINE

LC50 - for Fish	43,7 mg/l/96h Pimephales promelas
EC50 - for Crustacea	200 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	8 mg/l/72h Pseudokirchneriella subcapitata
Chronic NOEC for Fish	3,2 mg/l Oncorhynchus mykiss (60d)
Chronic NOEC for Crustacea	11 mg/l Daphnia magna (21d)

1,2-Benzisothiazol-3(2H)-one

LC50 - for Fish	1,3 mg/l/96h Onchorhynchus mykiss
EC50 - for Crustacea	1 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	0,11 mg/l/72h Pseudokirchneriella subcapitata
EC10 for Algae / Aquatic Plants	0,0403 mg/l/72h
Chronic NOEC for Fish	1,3 mg/l Onchorhynchus mykiss
Chronic NOEC for Crustacea	1,2 mg/l Daphnia magna
Chronic NOEC for Algae / Aquatic Plants	0,084 mg/l

Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one

methyl- 2H- isothiazol- 3-one (3:1)

LC50 - for Fish	0,188 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	0,16 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	0,0052 mg/l/72h Skeletonema costatum
Chronic NOEC for Fish	0,098 mg/l Oncorhynchus mykiss (28 d)
Chronic NOEC for Crustacea	0,004 mg/l Daphnia magna (21 d)
Chronic NOEC for Algae / Aquatic Plants	0,0012 mg/l Skeletonema costatum

3- Iodo- 2-propynyl- N- butylcarbamate

LC50 - for Fish	0,067 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	0,16 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	0,022 mg/l/72h Scenedesmus subspicatus
Chronic NOEC for Fish	0,049 mg/l Rainbow trout
Chronic NOEC for Algae / Aquatic Plants	0,0046 mg/l/72 Scenedesmus subspicatus

12.2. Persistence and degradability

AMORPHOUS SILICATE HYDRATE
Solubility in water 0,1 - 100 mg/l
Biodegradability: Information not available

2-BUTOXYETHANOL
Solubility in water 1000 - 10000 mg/l
Rapidly biodegradable

TRIETHYLAMINE
Solubility in water > 10000 mg/l
Rapidly biodegradable 80% (21d)

1,2-Benzisothiazol-3(2H)-one
Rapidly biodegradable

Mixture of: 5-chloro-2-methyl-2h-isothiazol-3-one and 2-methyl-2h-isothiazol-3-one

methyl- 2H- isothiazol- 3-one (3:1)
NOT rapidly biodegradable

3- Iodo- 2-propynyl- N- butylcarbamate
Rapidly biodegradable > 80%

12.3. Bioaccumulative potential

AMORPHOUS SILICATE HYDRATE
Partition coefficient: n-octanol/water 0,53

2-BUTOXYETHANOL
Partition coefficient: n-octanol/water 0,81

SECTION 12. Ecological information ... / >>

TRIETHYLAMINE
Partition coefficient: n-octanol/water 1,45
BCF < 0,5

1,2-Benzisothiazol-3(2H)-one
Partition coefficient: n-octanol/water 1,3

3- Iodo- 2-propynyl- N- butylcarbamate
Partition coefficient: n-octanol/water 2,81

12.4. Mobility in soil

2-BUTOXYETHANOL
Partition coefficient: soil/water 0,45

TRIETHYLAMINE
Partition coefficient: soil/water 2,57

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 greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

For disposal or recovery in EU countries , use the relevant waste code (EWC code) identified in the European Waste Catalogue. The producer of the waste must assign the EWC code according to the sector and type of process. Disposal must be carried out by an authorised waste management company.
After the producer of the waste has assigned the EWC code, the contaminated packaging must be sent for recovery or disposal in compliance with the European waste management regulations. Disposal must be carried out by an authorised waste management company.
For waste disposal or recovery in countries outside the EU, comply with the national or local regulations in force. For disposal or recovery of contaminated packaging in countries outside the EU, comply with the national or local regulations in force.
Waste transportation may be subject to regulations on transportation of hazardous goods.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

SECTION 14. Transport information ... / >>

14.6. Special precautions for user

Not applicable

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

Information not relevant

SECTION 15. Regulatory information

Only for uses exempt from EU DIRECTIVE 2004/42/CE.

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

Seveso Category - Directive 2012/18/EC: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
Product
Point 3

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisarion (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Information not available

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information

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

Flam. Liq. 2	Flammable liquid, category 2
Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
STOT RE 1	Specific target organ toxicity - repeated exposure, category 1
Skin Corr. 1A	Skin corrosion, category 1A
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
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 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H225	Highly flammable liquid and vapour.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.

SECTION 16. Other information ... / >>

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	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
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average 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 (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament

- The Merck Index. - 10th Edition

SECTION 16. Other information ... / >>

- 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.

Changes to previous review:
The following sections were modified:
02 / 03 / 08 / 09 / 11 / 12 / 15.