

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: 411 00 14680-2748
Product name: BUTYL SEALANT IB

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

Intended use: Sealant for industrial and professional use

1.3. Details of the supplier of the safety data sheet

Name: Meccanocar Italia S.r.l.
Full address: Via San Francesco, 22
District and Country: 56033 Capannoli (PI)
Italy

Tel. +39 0587 609433

Fax +39 0587 607145

e-mail address of the competent person

responsible for the Safety Data Sheet: moreno.meini@meccanocar.it

1.4. Emergency telephone number

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

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830. 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.
Skin irritation, category 2	H315	Causes skin 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:

BUTYL SEALANT IB

Signal words:

Danger

Hazard statements:

H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

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.
P370+P378 In case of fire: use CO2 fire extinguisher to extinguish.
P273 Avoid release to the environment.
P261 Avoid breathing dust / fume / gas / mist / vapours / spray.
P391 Collect spillage.

Contains: HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES
 ETHYL ACETATE

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**3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES CAS 64742-49-0 EC 927-510-4 INDEX Reg. no. 01-2119475515-33-XXXX	30 ≤ x < 32,5	Flam. Liq. 2 H225, Asp. Tox. 1 H304, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 2 H411
ETHYL ACETATE CAS 141-78-6 EC 205-500-4 INDEX 607-022-00-5 Reg. no. 01-2119475103-46-XXXX	4,5 ≤ x < 5	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
ZINC OXIDE		

BUTYL SEALANT IB

CAS 1314-13-2 2 ≤ x < 2,5 Aquatic Chronic 1 H410 M=1

EC 215-222-5

INDEX 030-013-00-7

Reg. no. 01-2119463881-32-XXXX

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

SECTION 4. First aid measures**4.1. Description of first aid measures**

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

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

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

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

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

Information not available

SECTION 5. Firefighting measures**5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

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

UNSUITABLE EXTINGUISHING EQUIPMENT

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

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

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters**GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

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

6.4. Reference to other sections

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

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. 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:

ESP	España
FRA	France
GBR	United Kingdom
ITA	Italia
NOR	Norge

LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
EH40/2005 Workplace exposure limits (Third edition, published 2018)
DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om

BUTYL SEALANT IB

PRT	Portugal	arbejdsmiljø, arbejdstid, stillingsvern mv. (arbejdsmiljøloven) § 1-3, § 1-4 og § 4-5 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 - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018 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 91/322/EEC. ACGIH 2019
EU	OEL EU	
	TLV-ACGIH	

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Threshold Limit Value

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

OEL EU 1400

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				149 mg/kg bw/d				
Inhalation				447 mg/m3				2085 mg/m3
Skin				149 mg/kg bw/d				300 mg/kg bw/d

ETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
VLA	ESP	734	200	1468	400			
VLEP	FRA	1400	400					
WEL	GBR	734	200	1468	400			
VLEP	ITA	734	200	1468	400			
TLV	NOR	734	200					
VLE	PRT	734	200	1468	400			
OEL	EU	734	200	1468	400			
TLV-ACGIH		1441	400					

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,24	mg/l
Normal value in marine water	0,024	mg/l
Normal value for fresh water sediment	1,15	mg/kg
Normal value for marine water sediment	0,115	mg/kg
Normal value of STP microorganisms	650	mg/l
Normal value for the food chain (secondary poisoning)	0,2	mg/kg
Normal value for the terrestrial compartment	0,148	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				4,5 mg/kg bw/d				
Inhalation	734 mg/m3	734 mg/m3	367 mg/m3	367 mg/m3	1468 mg/m3	1468 mg/m3	734 mg/m3	734 mg/m3
Skin				37 mg/kg bw/d				63 mg/kg bw/d

BUTYL SEALANT IB

ZINC OXIDE**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm			
VLA	ESP	2		10				
VLEP	FRA	5						
TLV	NOR	5						
TLV-ACGIH		2		10				
Predicted no-effect concentration - PNEC								
Normal value in fresh water				2,6		mg/l		
Normal value in marine water				0,61		mg/l		
Normal value for fresh water sediment				117,8		mg/kg		
Normal value for marine water sediment				56,5		mg/kg		
Normal value of STP microorganisms				10		mg/l		
Normal value for the terrestrial compartment				35,6		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				0,83 mg/kg bw/d				
Inhalation				2,5 mg/m3			0,5 mg/m3	5 mg/m3
Skin				83 mg/kg bw/d				83 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 II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

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, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

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

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

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

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

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Chemical resistant gloves are recommended. If contact with forearms is likely, wear glove-style gloves. Nitrile, CEN EN 420 and EN 374 standards provide general requirements and lists of glove types.

ETHYL ACETATE

Butyl rubber gloves (opening times > 480 minutes), Neoprene™ rubber, nitrile rubber (opening times up to 480 minutes).

ZINC OXIDE

Protective gloves (EN 374)

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	pasty liquid
Colour	black
Odour	characteristic
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	> 35 °C
Boiling range	Not available
Flash point	-13 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available

BUTYL SEALANT IB

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	Not available
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	2000000 cP a 20°C
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

Information not available

SECTION 10. Stability and reactivity**10.1. Reactivity**

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

ETHYL ACETATE

It slowly decomposes to acetic acid and ethanol due to the action of light, air and water. Stable under normal conditions. Upon storage, it is slowly decomposed by water.

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.

ETHYL ACETATE

Risk of explosion on contact with: alkaline metals,hydrides,oleum.May react violently with: fluorine,strong oxidising agents,chlorosulphuric acid,potassium tert-butoxide.Forms explosive mixtures with: air.

10.4. Conditions to avoid

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

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Avoid heat, sparks, open flames and other sources of ignition.

ETHYL ACETATE

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

Ignition sources.

10.5. Incompatible materials

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Strong oxidants.

ETHYL ACETATE

Incompatible with: acids,bases,strong oxidants,aluminium,nitrates,chlorosulphuric acid.Incompatible materials: plastic materials.

Oxidizing agents, acids, alkalis.

ZINC OXIDE

Acids and basics.

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.

ETHYL ACETATE

Carbon oxides on combustion.

ZINC OXIDE

ZnO fumes can be generated during heat treatment.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

BUTYL SEALANT IB

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) of the mixture:

Not classified (no significant component)

LD50 (Oral) of the mixture:

Not classified (no significant component)

LD50 (Dermal) of the mixture:

Not classified (no significant component)

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: standard acute oral test

Reliability: 2

Species: Rat (Charles River CD; male / female)

Route of exposure: Oral

Results: LD50> 8 mL / kg bw

Method: Equivalent or similar to OECD 403

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Inhalation (vapors)

Results: LC50> 23.3 mg / L air

Method: The acute toxicity of SBP 100/140 was determined according to Noakes and Sanderson (1969): A method for determining the dermal toxicity of pesticides, Br. J. Industr Med 26: 59-64.

Reliability: 2

Species: Rat (Charles River CD; male / female)

Route of exposure: Dermal

Results: LD50> = 4 mL / kg bw

ETHYL ACETATE

Method: Multi-Substance Rule for the Testing of Neurotoxicity 40 CFR Part 799 (58 FR 40262)

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Inhalation (vapors)

Results: Negative

Method: Not indicated

Reliability: 2

Species: Rabbit (New Zealand White; male)

Route of exposure: Dermal

Results: LD50> 20 000 mg / kg bw

ZINC OXIDE

Method: Equivalent or similar to OECD 401

Reliability: 2

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: LD50> 5 000 mg / kg bw

BUTYL SEALANT IB

Method: Equivalent or similar to OECD 403

Reliability: 2

Species: Rat (male / female)

Route of exposure: Inhalation

Results: LC50> 5 700 mg / m³ air

Method: OECD 402

Reliability: 1

Species: Rat (Wistar; male / female)

Route of exposure: Dermal

Results: LD50> 2 000 mg / kg bw

SKIN CORROSION / IRRITATION

Causes skin irritation

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Equivalent or similar to OECD 404

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Category 2, Irritating

ZINC OXIDE

Method: Not indicated

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Not irritating

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Federal Register of the F.D.A. 28 (110), 6.6.1963, para. 191.12. Test for eye irritants

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

ETHYL ACETATE

Method: OECD 405

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

ZINC OXIDE

Method: EU Method B.5

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

RESPIRATORY OR SKIN SENSITISATION

BUTYL SEALANT IB

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Equivalent or similar to OECD 406

Reliability: 2

Species: guinea pig (p-strain; male / female)

Route of exposure: Dermal

Results: Not sensitizing

Respiratory sensitization

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Skin sensitization

ETHYL ACETATE

Method: OECD 406

Reliability: 1

Species: guinea pig (Dunkin-Hartley; female)

Route of exposure: Dermal

Results: Not sensitizing

ZINC OXIDE

Method: OECD 406

Reliability: 1

Species: guinea pig (Dunkin-Hartley; females)

Route of exposure: Dermal

Results: Not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Equivalent or similar to OECD 471

Reliability: 1

Species: S. typhimurium, E. Coli

Results: Negative with or without metabolic activation

Bibliographic reference: Brooks, T.M. et al., The genetic toxicology of some hydrocarbon and oxygenated solvents (1988)

ETHYL ACETATE

Method: Equivalent or similar to OECD 471 in vitro test

Reliability: 2

Species: S. typhimurium

Results: Negative with and without metabolic activation

Method: Equivalent or similar to OECD 474 in vivo test

Reliability: 2

Species: Chinese hamster (male / female)

Route of exposure: Oral

Results: Negative

ZINC OXIDE

Method: Equivalent or similar to OECD 471 in vitro test

BUTYL SEALANT IB

Reliability: 2

Species: *S. typhimurium*

Results: Negative with and without metabolic activation

Method: OECD 474-test in vivo

Reliability: 1

Species: Mouse (NMRI; male)

Route of exposure: intraperitoneal

Results: Negative

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

ZINC OXIDE

Method: Not indicated

Reliability: 2

Species: Mouse (Chester Beatty stock; male / female)

Route of exposure: Oral

Results: NOAEL > 22 000 mg / L

Bibliographic reference: Walters M & Roe FJC, A Study of the Effects of Zinc and Tin Administered Orally to Mice Over a Prolonged Period (1965)

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

ETHYL ACETATE

Method: Equivalent or similar to OECD 416

Reliability: 1

Species: Mouse (CD-1; male / female)

Route of exposure: Oral

Results: Negative

Method: Equivalent or similar to OECD 414

Reliability: 2

Species: Rat (Sprague-Dawley)

Route of exposure: Inhalation

Results: Negative

Adverse effects on sexual function and fertility

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Equivalent or similar to OECD 416

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Inhalation (vapors)

Results: NOAEL 9000 ppm

ZINC OXIDE

Method: Equivalent or similar to OECD 416

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: LOAEL (fertility) 7.5 mg / kg bw / day

Adverse effects on development of the offspring

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Food and Drug Administration 1966 "Guidelines for Reproduction Studies for Safety Evaluation of Drugs for Human Use", Segment II

BUTYL SEALANT IB

Reliability: 2
Species: Rat (CD (SD))
Route of exposure: Inhalation (vapors)
Results: NOAEC 1 200 ppm

ZINC OXIDE

Method: OECD 414
Reliability: 1
Species: Rat (Wistar)
Route of exposure: Inhalation (aerosol)
Results: NOAEC (development) 7.5 mg / m³ air

STOT - SINGLE EXPOSURE

May cause drowsiness or dizziness

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

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

ETHYL ACETATE

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

ZINC OXIDE

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

Target organ
HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Central nervous system

ETHYL ACETATE

Central nervous system

Route of exposure
HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Inhalation

ETHYL ACETATE

Inhalation

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Method: Not indicated
Reliability: 2
Species: Rat (Wistar; male)

BUTYL SEALANT IB

Route of exposure: Inhalation (vapors)

Results: NOAEC 12 470 mg / m³ air

Bibliographic reference: Takeuchi, Y. et al., A comparative study of the toxicity of n-pentane, n-hexane, and n-heptane to the peripheral nerve of the rat. (1981)

ETHYL ACETATE

Method: Equivalent or similar to EPA OTS 795.2600

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: NOAEL 900 mg / kg bw / day

Method: EPA OTS 798.2450

Reliability: 1

Species: Rat (CrI: CD@BR; male / female)

Route of exposure: Inhalation

Results: LOEC 350 ppm

ZINC OXIDE

Method: OECD 408

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Oral

Results: NOAEL 31.52 mg / kg bw

Method: OECD 413

Reliability: 1

Species: Rat (Wistar; male)

Route of exposure: Inhalation (aerosol)

Results: NOAEL 1.5 mg / m³ air

Method: OECD 410

Reliability: 2

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Dermal

Results: LOAEL 75 mg / kg bw / day

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

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

12.1. Toxicity

ZINC OXIDE

LC50 - for Fish

1,1 mg/l/96h *Oncorhynchus mykiss*

EC50 - for Crustacea

1,7 mg/l/48h *Daphnia magna*

EC50 - for Algae / Aquatic Plants

0,14 mg/l/72h *Pseudokirchnerella subcapitata*

Chronic NOEC for Fish

0,53 mg/l

Chronic NOEC for Algae / Aquatic Plants

0,024 mg/l

HYDROCARBONS, C7, N-ALCANS,
ISOALKANS, CYCLES

LC50 - for Fish

13,4 mg/l/96h

12.2. Persistence and degradability

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

Quickly degradable in water, 98% in 28 days.

ETHYL ACETATE

Rapidly degradable, 60% in 10 days.

ZINC OXIDE

Solubility in water 2,9 mg/l

NOT rapidly degradable

ETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

ZINC OXIDE

BCF > 175

ETHYL ACETATE

Partition coefficient: n-octanol/water 0,68

BCF 30

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 greater than 0,1%.

12.6. 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.

HYDROCARBONS, C7, N-ALCANS, ISOALKANS, CYCLES

The product is suitable for combustion in a closed controlled burner for the value or disposal of the fuel by supervised incineration at very high temperatures to prevent the formation of undesirable combustion products.

BUTYL SEALANT IB**ETHYL ACETATE**

Dispose of as hazardous waste. Recover or recycle if possible. Otherwise incineration. Dispose according to local regulations.

Disposal of the container: empty the container completely. Empty containers may contain highly flammable residues. Do not cut, grind, puncture, weld or dispose of containers unless adequate precautions have been taken against this hazard. Do not remove the container labels until they are cleaned. Send to drum recovery or metal recovery.

ZINC OXIDE

The assignment of a waste code number, according to the European Waste Catalog, should be done in agreement with the regional waste disposal company.

SECTION 14. Transport information**14.1. UN number**

ADR / RID, IMDG, 3175
IATA:

14.2. UN proper shipping name

ADR / RID: SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.
IMDG: SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.
IATA: SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.

14.3. Transport hazard class(es)

ADR / RID: Class: 4.1 Label: 4.1
IMDG: Class: 4.1 Label: 4.1
IATA: Class: 4.1 Label: 4.1

**14.4. Packing group**

ADR / RID, IMDG, II
IATA:

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 40

Special Provision: -

Limited
Quantities: 1
kg

Tunnel
restriction
code: (E)

BUTYL SEALANT IB

IMDG:	EMS: F-A, S-I	Limited Quantities: 1 kg	
IATA:	Cargo:	Maximum quantity: 50 Kg	Packaging instructions: 448
	Pass.:	Maximum quantity: 15 Kg	Packaging instructions: 445
	Special Instructions:	A46	

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

Information not relevant

SECTION 15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso Category - Directive 2012/18/EC: P5c-E2

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

<u>Product</u>	
Point	3 - 40

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 authorisation (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

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
Asp. Tox. 1	Aspiration hazard, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

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

BUTYL SEALANT IB

1. Regulation (EC) 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
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) 2018/1480 (XIII Atp. CLP)
16. Regulation (EU) 2019/521 (XII 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.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15.