



SEAL & FIX

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier: SEAL & FIX
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:
Relevant uses: Adhesive
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:
EVOCHEM S.A.
Tzaverdella Place
133 41 PHILI , ATTICA
Phone.: 0030 210 5590460 , 0030 210 5590155
Fax: 0030 210 6254737 , 0030 210 5590244
info@evochem.gr
sales@evochem.gr
www.evochem.gr
- 1.4 Emergency telephone number: National Poisoning Center 2107793777

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:
Directive 67/548/EC and Directive 1999/45/EC:
This product was classified in accordance with Directive 67/548/EC and Directive 1999/45/EC, adapting the requirements to Regulation (EC) n°1907/2006 (REACH regulation).
F: R11 - Highly flammable
Xi: R36 - Irritating to eyes
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R66 - Repeated exposure may cause skin dryness or cracking
R67 - Vapours may cause drowsiness and dizziness
CLP Regulation (EC) n° 1272/2008:
Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3
Eye Irrit. 2: Eye irritation, Category 2
Flam. Liq. 2: Flammable liquids, Category 2
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3
- 2.2 Label elements:
Directive 67/548/EC and Directive 1999/45/EC:
In accordance with the legislation, the elements on the label are as follows:
- | | |
|--|---|
| F

Highly flammable | Xi

Irritant |
|--|---|
- R Phrases:
R11: Highly flammable
R36: Irritating to eyes
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R66: Repeated exposure may cause skin dryness or cracking
R67: Vapours may cause drowsiness and dizziness
S Phrases:
S16: Keep away from sources of ignition - No smoking
S2: Keep out of the reach of children
S43: In case of fire, use polyvalent powder ABC
S46: If swallowed, seek medical advice immediately and show this container or label
S9: Keep container in a well-ventilated place
Supplementary information:
Non-applicable
CLP Regulation (EC) n° 1272/2008:
Danger

- CONTINUED ON NEXT PAGE -

SEAL & FIX

SECTION 2: HAZARDS IDENTIFICATION (continue)



Hazard statements:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects
Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 2: H225 - Highly flammable liquid and vapour
STOT SE 3: H336 - May cause drowsiness or dizziness

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P103: Read label before use
P280: Wear protective gloves/protective clothing/eye protection/face protection
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

Supplementary information:

EUH066: Repeated exposure may cause skin dryness or cracking

Substances that contribute to the classification

2-butanone; Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

2.3 Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical description: Mixture composed of additives and resins in solvents

Components:

In accordance with Annex II of Regulation (EC) n°1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 78-93-3 EC: 201-159-0 Index: 606-002-00-3 REACH: 01-2119457290-43-XXXX	2-butanone Directive 67/548/EC F: R11; Xi: R36; R66; R67 Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	ATP CLP00 10 - <25 %
CAS: Non-applicable EC: 921-024-6 Index: Non-applicable REACH: 01-2119475514-35-XXXX	Hydrocarbons, C6 -C7, n -alkanes, isoalkanes, cyclics, <5% n -hexane Directive 67/548/EC F: R11; N: R51/53; Xi: R38; Xn: R65; R67 Regulation 1272/2008 Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 2: H225; Skin Irrit. 2: H315; STOT SE 3: H336 - Danger	Self-classified 2,5 - <10 %
CAS: 91-20-3 EC: 202-049-5 Index: 601-052-00-2 REACH: 01-2119561346-37-XXXX	Naphthalene Directive 67/548/EC Carc. Cat 3: R40; N: R50/53; Xn: R22 Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Carc. 2: H351 - Warning	ATP CLP00 <1 %

To obtain more information on the risk of the substances consult sections 8, 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the MSDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

SEAL & FIX

SECTION 4: FIRST AID MEASURES (continue)

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with luke warm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the MSDS of the product.

By consumption:

Do not induce vomiting, but if it does happen keep the head up to avoid inhalation. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertizing agent. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

- CONTINUED ON NEXT PAGE -

SEAL & FIX

SECTION 6: ACCIDENTAL RELEASE MEASURES (continue)

- 6.2 Environmental precautions:
Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.
- 6.3 Methods and material for containment and cleaning up:
It is recommended:
Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.
- 6.4 Reference to other sections:
See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling:
- A.- Precautions for safe manipulation
Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.
- B.- Technical recommendations for the prevention of fires and explosions
Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 94/9/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.
- C.- Technical recommendations to prevent ergonomic and toxicological risks
Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.
- D.- Technical recommendations to prevent environmental risks
Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.
- 7.2 Conditions for safe storage, including any incompatibilities:
- A.- Technical measures for storage
Minimum Temp.: 5 °C
Maximum Temp.: 30 °C
Maximum time: 12 Months
- B.- General conditions for storage
Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5
- 7.3 Specific end use(s):
Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters:
Substances whose occupational exposure limits have to be monitored in the work environment

Identification	Environmental limits	
	IOELV (8h)	IOELV (STEL)
2-butanone CAS: 78-93-3 EC: 201-159-0	200 ppm	600 mg/m ³
	300 ppm	900 mg/m ³
	Year	
	2014	
Naphthalene CAS: 91-20-3 EC: 202-049-5	10 ppm	50 mg/m ³
	IOELV (STEL)	
	Year	
	2014	

DNEL (Workers):

- CONTINUED ON NEXT PAGE -

SEAL & FIX

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1161 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	600 mg/m ³	Non-applicable
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Non-applicable EC: 921-024-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	773 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2035 mg/m ³	Non-applicable
Naphthalene CAS: 91-20-3 EC: 202-049-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	3,57 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	25 mg/m ³	25 mg/m ³

DNEL (Population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	31 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	412 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	106 mg/m ³	Non-applicable
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Non-applicable EC: 921-024-6	Oral	Non-applicable	Non-applicable	699 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	699 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	608 mg/m ³	Non-applicable

PNEC:

Identification					
2-butanone CAS: 78-93-3 EC: 201-159-0	STP	709 mg/L	Fresh water	55,8 mg/L	
	Soil	22,5 mg/kg	Marine water	55,8 mg/L	
	Intermittent	55,8 mg/L	Sediment (Fresh water)	284,74 mg/kg	
	Oral	1000 g/kg	Sediment (Marine water)	284,7 mg/kg	
Naphthalene CAS: 91-20-3 EC: 202-049-5	STP	2,9 mg/L	Fresh water	0,0024 mg/L	
	Soil	0,0533 mg/kg	Marine water	0,0024 mg/L	
	Intermittent	0,02 mg/L	Sediment (Fresh water)	0,0672 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0,0672 mg/kg	

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the professional exposure limits. In case of using individual protection equipment they should have the "CE marking" in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory respiratory tract protection	Filter mask for gases, vapours and particles	CAT III	EN 149:2001+A1:2009 EN 405:2001+A1:2009	Replace when an increase in resistance to breathing is observed and/or a smell or taste of the contaminant is detected.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	NON-disposable chemical protective gloves	CAT III	EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.





D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Face mask	CAT II	EN 166:2001 EN 167:2001 EN 168:2001 EN 172:1994/A1:2000 EN 172:1994/A2:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.



E.- Bodily protection

SEAL & FIX

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties		EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2001 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties		EN 13287:2008 EN ISO 20345:2011 EN 13832-1:2006 EN ISO 20344:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatil organic compounds:

With regard to Directive 1999/13/EC, this product has the following characteristics:

V.O.C. (Supply):

V.O.C. density at 20 °C: Non-applicable

Average carbon number:

Average molecular weight:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C: Liquid

Appearance: Paste

Color: Not available

Odor: Not available

Volatility:

Boiling point at atmospheric pressure: 84 °C

Vapour pressure at 20 °C: Non-applicable *

Vapour pressure at 50 °C:

Evaporation rate at 20 °C: Non-applicable *

Product description:

Density at 20 °C: Non-applicable *

Relative density at 20 °C: 1,2

Dynamic viscosity at 20 °C: Non-applicable *

Kinematic viscosity at 20 °C: Non-applicable *

Kinematic viscosity at 40 °C:

Concentration: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

SEAL & FIX

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continue)

pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility property:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Flammability:	
Flash Point:	-7 °C
Autoignition temperature:	367 °C
Lower flammability limit:	Not available
Upper flammability limit:	Not available

9.2 Other information:

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected if the following technical instructions storage of chemicals. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Avoid direct impact	Avoid direct impact	Not applicable

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

- CONTINUED ON NEXT PAGE -

SEAL & FIX

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

No experimental information is available on the product itself in relation to the toxicological properties. When performing the danger classification on corrosive or irritant effects the recommendations included in section 3.2.5 of Annex VI of Directive 67/548/EC, in paragraphs b) and c) of section 3 of article 6 of Directive 1999/45/EC and in section 3.2.3.3.5. of Annex I of CLP Regulation were taken into account.

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A.- Ingestion:

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.

B- Inhalation:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.

C- Contact with the skin and the eyes:

Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous with carcinogenic effects. For more information see section 3.

E- Sensitizing effects:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitizing effects. For more information see section 3.

F- Specific target organ toxicity (STOT)-time exposure:

Exposure in high concentrations can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion and in serious cases, loss of concentration.

G- Specific target organ toxicity (STOT)-repeated exposure:

Repeated exposure may cause skin dryness or cracking

H- Aspiration hazard:

Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification		Acute toxicity		Genus
2-butanone CAS: 78-93-3 EC: 201-159-0	LD50 oral	4000 mg/kg		Rat
	LD50 dermal	6400 mg/kg		Rabbit
	LC50 inhalation	23,5 mg/L (4 h)		Rat
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Non-applicable EC: 921-024-6	LD50 oral	5840 mg/kg		Rat
	LD50 dermal	2920 mg/kg		Rat
	LC50 inhalation	Non-applicable		
Naphthalene CAS: 91-20-3 EC: 202-049-5	LD50 oral	500 mg/kg		Rat
	LD50 dermal	Non-applicable		
	LC50 inhalation	Non-applicable		

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the ecotoxicological properties of the product itself is not available

12.1 Toxicity:

Identification		Acute toxicity	Specie	Genus
2-butanone CAS: 78-93-3 EC: 201-159-0	LC50	3220 mg/L (96 h)	Pimephales promelas	Fish
	EC50	5091 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	4300 mg/L (168 h)	Scenedesmus quadricauda	Alga
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Non-applicable EC: 921-024-6	LC50	5,1 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		
Naphthalene CAS: 91-20-3 EC: 202-049-5	LC50	0,1 - 1 mg/L (96 h)		Fish
	EC50	0,1 - 1 mg/L		Crustacean
	EC50	0,1 - 1 mg/L		Alga

12.2 Persistence and degradability:

SEAL & FIX

SECTION 12: ECOLOGICAL INFORMATION (continue)

Identification	Degradability		Biodegradability	
2-butanone CAS: 78-93-3 EC: 201-159-0	BOD5	2.03 g O2/g	Concentration	Non-applicable
	COD	2.31 g O2/g	Period	20 days
	BOD5/COD	0.88	% Biodegradable	89 %
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Non-applicable EC: 921-024-6	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	98 %
Naphthalene CAS: 91-20-3 EC: 202-049-5	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	2 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
2-butanone CAS: 78-93-3 EC: 201-159-0	BCF	3
	Pow Log	0,29
	Potential	Low
Naphthalene CAS: 91-20-3 EC: 202-049-5	BCF	168
	Pow Log	3,3
	Potential	High

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2-butanone CAS: 78-93-3 EC: 201-159-0	Koc	30	Henry	5,765E+0 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	23960 N/m (25 °C)	Moist soil	Yes
Naphthalene CAS: 91-20-3 EC: 202-049-5	Koc	817	Henry	4,458E+1 Pa·m ³ /mol
	Conclusion	Moderate	Dry soil	Non-applicable
	Surface tension	13060 N/m (277,74 °C)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Directive 2008/98/EC)
08 04 09*	Waste adhesives and sealants containing organic solvents or other dangerous substances	Dangerous

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2000/532/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommend disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) n°1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2000/532/EC: Commission Decision of 3 May 2000

- CONTINUED ON NEXT PAGE -

SEAL & FIX

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2013 and RID 2013:



14.1	UN number:	UN1133
14.2	UN proper shipping name:	ADHESIVES containing flammable liquid
14.3	Transport hazard class(es):	3
	Labels:	3
14.4	Packing group:	II
14.5	Dangerous for the environment:	No
14.6	Special precautions for user	
	Special regulations:	640D
	Tunnel restriction code:	D/E
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 36-12:



14.1	UN number:	UN1133
14.2	UN proper shipping name:	ADHESIVES containing flammable liquid
14.3	Transport hazard class(es):	3
	Labels:	3
14.4	Packing group:	II
14.5	Dangerous for the environment:	No
14.6	Special precautions for user	
	Special regulations:	944
	EmS Codes:	F-E, S-D
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2014:



14.1	UN number:	UN1133
14.2	UN proper shipping name:	ADHESIVES containing flammable liquid
14.3	Transport hazard class(es):	3
	Labels:	3
14.4	Packing group:	II
14.5	Dangerous for the environment:	No
14.6	Special precautions for user	
	Physico-Chemical properties:	see section 9
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Non-applicable

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SEAL & FIX

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012): Naphthalene (excluded for the product type 19)

Regulation (EC) 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII, REACH):

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- "whoopee" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009, 2009 No. 716

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG 2009), SI 2009 No 1348

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011, 2011 No. 1885

Control of Substances Hazardous to Health Regulations 2002 (as amended)

EH40/2005 Workplace exposure limits

The Waste Regulations 2011, 2011 No. 988

15.2 Chemical safety assessment:

The provider has carried out a chemical safety assessment

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EC) N° 453/2010)

Modifications related to the previous security card which concerns the ways of managing risks. :

Directive 67/548/EC and Directive 1999/45/EC:

- Pictograms
- R Phrases
- S Phrases

CLP Regulation (EC) n° 1272/2008:

- Pictograms
- Hazard statements
- Precautionary statements

TRANSPORT INFORMATION:

- UN number
- Packing group

Text of R -phrases considered in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

Directive 67/548/EC and Directive 1999/45/EC:

- R11: Highly flammable
- R22: Harmful if swallowed
- R36: Irritating to eyes
- R38: Irritating to skin
- R40: Limited evidence of a carcinogenic effect
- R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- R65: Harmful: may cause lung damage if swallowed
- R66: Repeated exposure may cause skin dryness or cracking
- R67: Vapours may cause drowsiness and dizziness

CLP Regulation (EC) n° 1272/2008:

SEAL & FIX

SECTION 16: OTHER INFORMATION (continue)

Acute Tox. 4: H302 - Harmful if swallowed
Aquatic Acute 1: H400 - Very toxic to aquatic life
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways
Carc. 2: H351 - Suspected of causing cancer
Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 2: H225 - Highly flammable liquid and vapour
Skin Irrit. 2: H315 - Causes skin irritation
STOT SE 3: H336 - May cause drowsiness or dizziness

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://esis.jrc.ec.europa.eu>

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

Abbreviations and acronyms:

- ADR: European agreement concerning the international carriage of dangerous goods by road
- IMDG: International maritime dangerous goods code
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organisation
- COD: Chemical Oxygen Demand
- BOD5: 5-day biochemical oxygen demand
- BCF: Bioconcentration factor
- LD50: Lethal Dose 50
- CL50: Lethal Concentration 50
- EC50: Effective concentration 50
- Log-POW: Octanol–water partition coefficient
- Koc: Partition coefficient of organic carbon

The information contained in this security data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this security data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -