ABchimie - UV conformal coating
ABchimie526UV DS55M

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

1.1 Product identifier: ABchimie - UV conformal coating
ABchimie526UV DS55M

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

Relevant uses: Resin. For professional user/industrial user only.

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:

ABchimie
1230, route de la porte ZA La Rivoire
38630 CORBELIN - FRANCE
Phone.: 04.74.83.12.19 -
Fax: 04.74.83.68.62
info@abchimie.com
www.abchimie.com

1.4 Emergency telephone number:

SECTION 2: HAZARDS IDENTIFICATION **

2.1 Classification of the substance or mixture:

CLP Regulation (EC) nº 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) nº 1272/2008.

Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411
Eye Irrit. 2: Eye irritation, Category 2, H319
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317
STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335

2.2 Label elements:

CLP Regulation (EC) nº 1272/2008:

Warning

Hazard statements:

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects
Eye Irrit. 2: H319 - Causes serious eye irritation
Skin Irrit. 2: H315 - Causes skin irritation
Skin Sens. 1A: H317 - May cause an allergic skin reaction
STOT SE 3: H335 - May cause respiratory irritation

Precautionary statements:

P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection
P302+P352: IF ON SKIN: Wash with plenty of water
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P333+P313: If skin irritation or rash occurs: Get medical advice/attention
P363: Wash contaminated clothing before reuse
P391: Collect spillage
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

Supplementary information:

EUH204: Contains isocyanates. May produce an allergic reaction

Substances that contribute to the classification

Hexane, 1,6-diisocyanato-, homopolymer, 2-hydroxyethyl acrylate-blocked; Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate; 2-phenoxyethyl acrylate

2.3 Other hazards:

Non-applicable

*** Changes with regards to the previous version*

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture composed of additives and acrylic oligomers

Components:

In accordance with Annex II of Regulation (EC) nº1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 264888-31-5 EC: Non-applicable Index: Non-applicable REACH: Non-applicable	**Hexane, 1,6-diisocyanato-, homopolymer, 2-hydroxyethyl acrylate-blocked**	Self-classified	**25 - <50 %**
	Regulation 1272/2008	Aquatic Chronic 3: H412; Skin Sens. 1B: H317 - Warning	
CAS: 5888-33-5 EC: 227-561-6 Index: 607-133-00-9 REACH: 01-2119957862-25-XXXX	**Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate**	ATP CLP00	**25 - <50 %**
	Regulation 1272/2008	Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; STOT SE 3: H335 - Warning	
CAS: 2399-48-6 EC: 219-268-7 Index: Non-applicable REACH: Non-applicable	**Tetrahydrofurfuryl acrylate**	Self-classified	**10 - <25 %**
	Regulation 1272/2008	Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	
CAS: 48145-04-6 EC: 256-360-6 Index: 607-133-00-9 REACH: 01-2119980532-35-XXXX	**2-phenoxyethyl acrylate**	Self-classified	**2,5 - <10 %**
	Regulation 1272/2008	Aquatic Chronic 2: H411; Skin Sens. 1A: H317 - Warning	
CAS: 7473-98-5 EC: 231-272-0 Index: Non-applicable REACH: 01-2119472306-39-XXXX	**2-hydroxy-2-methylpropiophenone**	Self-classified	**1 - <2,5 %**
	Regulation 1272/2008	Acute Tox. 4: H302 - Warning	
CAS: 4083-64-1 EC: 223-810-8 Index: 615-012-00-7 REACH: 01-2119980050-47-XXXX	**4-isocyanatosulphonyltoluene**	ATP CLP00	**0,1 - <1 %**
	Regulation 1272/2008	Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Irrit. 2: H315; STOT SE 3: H335; EUH014 - Danger	
CAS: 162881-26-7 EC: 423-340-5 Index: 015-189-00-5 REACH: 01-2119489401-38-XXXX	**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**	ATP CLP00	**0,1 - <1 %**
	Regulation 1272/2008	Aquatic Chronic 4: H413; Skin Sens. 1: H317 - Warning	
CAS: 79-92-5 EC: 201-234-8 Index: Non-applicable REACH: 01-2119446293-40-XXXX	**Camphene**	Self-classified	**0,1 - <1 %**
	Regulation 1272/2008	Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Irrit. 2: H319; Flam. Sol. 2: H228 - Warning	
CAS: 55406-53-6 EC: 259-627-5 Index: 616-212-00-7 REACH: Non-applicable	**3-iodo-2-propynyl Butylcarbamate**	ATP ATP06	**0,1 - <1 %**
	Regulation 1272/2008	Acute Tox. 3: H331; Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Sens. 1: H317; STOT RE 1: H372 - Danger	
CAS: 107-98-2 EC: 203-539-1 Index: 603-064-00-3 REACH: 01-2119457435-35-XXXX	**1-methoxy-2-propanol**	ATP ATP01	**<0,1 %**
	Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 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 SDS 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:

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SECTION 4: FIRST AID MEASURES (continued)

Contains substances that react violently with water. Remove contaminated clothing and shoes, clean the affected area with care. In the case of serious reaction consult a doctor. If the product produces burns or freezing, do not remove clothing as it could worsen the injury. In case of blisters forming on the skin, do not burst them as it could increase the risk of infection.

By eye contact:

Contains substances that react violently with water. Clean the affected area with care. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. Request immediate medical assistance, showing the SDS of this product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. 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:

WARNING! Product that contains substances that react violently with water. NEVER USE WATER TO EXTINGUISH THE FIRE. If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO_2).

5.2 Special hazards arising from the substance or mixture:

Contains substances that react violently with water.

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:

AVOID CONTACT WITH WATER. Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those who do not have 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 inertization 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.

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:

DO NOT USE WATER TO CLEAN.

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

- CONTINUED ON NEXT PAGE -

SECTION 7: HANDLING AND STORAGE (continued)

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

Avoid contact with water and the evaporation of the product, as it could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid projections and pulverizations. 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 ºC

Maximum Temp.: 30 ºC

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		
1-methoxy-2-propanol	IOELV (8h)	100 ppm	375 mg/m³
CAS: 107-98-2	IOELV (STEL)	150 ppm	563 mg/m³
EC: 203-539-1	Year	2015	

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 5888-33-5	Dermal	Non-applicable	Non-applicable	1,39 mg/kg	Non-applicable
EC: 227-561-6	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable
2-phenoxyethyl acrylate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 48145-04-6	Dermal	Non-applicable	Non-applicable	1,5 mg/kg	Non-applicable
EC: 256-360-6	Inhalation	Non-applicable	Non-applicable	10 mg/m³	77 mg/m³
2-hydroxy-2-methylpropiophenone	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 7473-98-5	Dermal	1,25 mg/kg	Non-applicable	1,25 mg/kg	Non-applicable
EC: 231-272-0	Inhalation	3,5 mg/m³	3,5 mg/m³	3,5 mg/m³	Non-applicable
4-isocyanatosulphonyltoluene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 4083-64-1	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 223-810-8	Inhalation	Non-applicable	Non-applicable	3,24 mg/m³	Non-applicable
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 162881-26-7	Dermal	Non-applicable	Non-applicable	3,3 mg/kg	Non-applicable
EC: 423-340-5	Inhalation	Non-applicable	Non-applicable	7,8 mg/m³	Non-applicable
Camphene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 79-92-5	Dermal	1,25 mg/kg	Non-applicable	0,21 mg/kg	Non-applicable
EC: 201-234-8	Inhalation	110,19 mg/m³	Non-applicable	110,19 mg/m³	Non-applicable
1-methoxy-2-propanol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 107-98-2	Dermal	Non-applicable	Non-applicable	50,6 mg/kg	Non-applicable
EC: 203-539-1	Inhalation	Non-applicable	553,5 mg/m³	369 mg/m³	Non-applicable

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	Oral	Non-applicable	Non-applicable	0,83 mg/kg	Non-applicable
CAS: 5888-33-5	Dermal	Non-applicable	Non-applicable	0,83 mg/kg	Non-applicable
EC: 227-561-6	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable
2-hydroxy-2-methylpropiophenone	Oral	0,625 mg/kg	Non-applicable	0,625 mg/kg	Non-applicable
CAS: 7473-98-5	Dermal	0,625 mg/kg	Non-applicable	0,625 mg/kg	Non-applicable
EC: 231-272-0	Inhalation	0,9 mg/m³	0,9 mg/m³	0,9 mg/m³	Non-applicable
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	Oral	Non-applicable	Non-applicable	1,7 mg/kg	Non-applicable
CAS: 162881-26-7	Dermal	Non-applicable	Non-applicable	1,7 mg/kg	Non-applicable
EC: 423-340-5	Inhalation	Non-applicable	Non-applicable	1,9 mg/m³	Non-applicable
Camphene	Oral	0,625 mg/kg	Non-applicable	0,1 mg/kg	Non-applicable
CAS: 79-92-5	Dermal	0,625 mg/kg	Non-applicable	0,1 mg/kg	Non-applicable
EC: 201-234-8	Inhalation	54,3 mg/m³	Non-applicable	54,3 mg/m³	Non-applicable
1-methoxy-2-propanol	Oral	Non-applicable	Non-applicable	3,3 mg/kg	Non-applicable
CAS: 107-98-2	Dermal	Non-applicable	Non-applicable	18,1 mg/kg	Non-applicable
EC: 203-539-1	Inhalation	Non-applicable	Non-applicable	43,9 mg/m³	Non-applicable

PNEC:

Identification				
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	STP	2 mg/L	Fresh water	0,00092 mg/L
CAS: 5888-33-5	Soil	0,0285 mg/kg	Marine water	0,000092 mg/L
EC: 227-561-6	Intermittent	0,00704 mg/L	Sediment (Fresh water)	0,145 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0145 mg/kg
2-phenoxyethyl acrylate	STP	1,77 mg/L	Fresh water	0,002 mg/L
CAS: 48145-04-6	Soil	0,006 mg/kg	Marine water	0,0002 mg/L
EC: 256-360-6	Intermittent	0,0121 mg/L	Sediment (Fresh water)	0,02 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,002 mg/kg
2-hydroxy-2-methylpropiophenone	STP	45 mg/L	Fresh water	0,00195 mg/L
CAS: 7473-98-5	Soil	0,000674 mg/kg	Marine water	0,000195 mg/L
EC: 231-272-0	Intermittent	0,0195 mg/L	Sediment (Fresh water)	0,00514 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,000514 mg/kg
4-isocyanatosulphonyltoluene	STP	0,4 mg/L	Fresh water	0,03 mg/L
CAS: 4083-64-1	Soil	0,0168 mg/kg	Marine water	0,003 mg/L
EC: 223-810-8	Intermittent	0,3 mg/L	Sediment (Fresh water)	0,172 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0172 mg/kg
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	STP	1 mg/L	Fresh water	0,001 mg/L
CAS: 162881-26-7	Soil	Non-applicable	Marine water	0,001 mg/L
EC: 423-340-5	Intermittent	0,001 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
Camphene	STP	10 mg/L	Fresh water	0,00072 mg/L
CAS: 79-92-5	Soil	0,0211 mg/kg	Marine water	0,000072 mg/L
EC: 201-234-8	Intermittent	0,00072 mg/L	Sediment (Fresh water)	0,0262 mg/kg
	Oral	2,08 g/kg	Sediment (Marine water)	0,00262 mg/kg
1-methoxy-2-propanol	STP	100 mg/L	Fresh water	10 mg/L
CAS: 107-98-2	Soil	5,49 mg/kg	Marine water	1 mg/L
EC: 203-539-1	Intermittent	100 mg/L	Sediment (Fresh water)	52,3 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	5,2 mg/kg

8.2 Exposure controls:

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

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<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 more 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 and vapours	CE CAT III	EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	Protective gloves against minor risks	CE CAT I		Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420 and EN 374.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Panoramic glasses against splash/projections.	CE CAT II	EN 166:2001 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

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CE CAT I		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2001, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	CE CAT II	EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345 y EN 13832-1

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

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply): 2,08 % weight

V.O.C. density at 20 ºC: 22,49 kg/m³ (22,49 g/L)

Average carbon number: 6,89

Average molecular weight: 146,1 g/mol

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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 ºC:	Liquid
Appearance:	Transparent
Colour:	Yellowish
Odour:	Not available
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	261 ºC
Vapour pressure at 20 ºC:	17 Pa
Vapour pressure at 50 ºC:	125 Pa (0 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	1080 kg/m³
Relative density at 20 ºC:	1,083
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	50 - 90 cSt
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *
Solubility in water at 20 ºC:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

Flammability:

Flash Point:	102 ºC
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	180 ºC
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

9.2 Other information:

Surface tension at 20 ºC:	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 because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

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

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SECTION 10: STABILITY AND REACTIVITY (continued)

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	Precaution	Avoid direct impact	Precaution

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

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.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

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

Contains glycols. With possibility of effects that are hazardous to the health, it is recommended not to breathe the vapours for long periods of time.

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 (acute effect):

- Acute toxicity : 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.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

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

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

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

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

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

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, however, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

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

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Hexane, 1,6-diisocyanato-, homopolymer, 2-hydroxyethyl acrylate-blocked	LD50 oral	5500 mg/kg	Rat
CAS: 264888-31-5	LD50 dermal	Non-applicable	
EC: Non-applicable	LC50 inhalation	Non-applicable	
2-hydroxy-2-methylpropiophenone	LD50 oral	1694 mg/kg	Rat
CAS: 7473-98-5	LD50 dermal	Non-applicable	
EC: 231-272-0	LC50 inhalation	Non-applicable	
3-iodo-2-propynyl Butylcarbamate	LD50 oral	1100 mg/kg	Rat
CAS: 55406-53-6	LD50 dermal	2100 mg/kg (ATEi)	Rabbit
EC: 259-627-5	LC50 inhalation	3 mg/L (4 h) (ATEi)	
4-isocyanatosulphonyltoluene	LD50 oral	2600 mg/kg	Rat
CAS: 4083-64-1	LD50 dermal	Non-applicable	
EC: 223-810-8	LC50 inhalation	Non-applicable	
Camphene	LD50 oral	5500 mg/kg	Rat
CAS: 79-92-5	LD50 dermal	8189 mg/kg	Rabbit
EC: 201-234-8	LC50 inhalation	Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Identification	Acute toxicity		Species	Genus
Hexane, 1,6-diisocyanato-, homopolymer, 2-hydroxyethyl acrylate-blocked	LC50	Non-applicable		
CAS: 264888-31-5	EC50	58 mg/L (48 h)	Daphnia magna	Crustacean
EC: Non-applicable	EC50	Non-applicable		
Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate	LC50	1 - 10 mg/L (96 h)		Fish
CAS: 5888-33-5	EC50	1 - 10 mg/L		Crustacean
EC: 227-561-6	EC50	1 - 10 mg/L		Algae
2-phenoxyethyl acrylate	LC50	1 - 10 mg/L (96 h)		Fish
CAS: 48145-04-6	EC50	1 - 10 mg/L		Crustacean
EC: 256-360-6	EC50	1 - 10 mg/L		Algae
4-isocyanatosulphonyltoluene	LC50	597 mg/L (96 h)	Brachydanio rerio	Fish
CAS: 4083-64-1	EC50	Non-applicable		
EC: 223-810-8	EC50	Non-applicable		
Camphene	LC50	0.72 mg/L (96 h)	Brachydanio rerio	Fish
CAS: 79-92-5	EC50	46 mg/L (24 h)	Daphnia magna	Crustacean
EC: 201-234-8	EC50	Non-applicable		
3-iodo-2-propynyl Butylcarbamate	LC50	0.07 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 55406-53-6	EC50	0.09 mg/L (96 h)	Mysidopsis bahia	Crustacean
EC: 259-627-5	EC50	0.05 mg/L (72 h)	Scenedesmus subspicatus	Algae
1-methoxy-2-propanol	LC50	20800 mg/L (96 h)	Pimephales promelas	Fish
CAS: 107-98-2	EC50	23300 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-539-1	EC50	1000 mg/L (168 h)	Selenastrum capricornutum	Algae

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Camphene	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 79-92-5	COD	Non-applicable	Period	28 days
EC: 201-234-8	BOD5/COD	Non-applicable	% Biodegradable	4 %

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Degradability		Biodegradability	
1-methoxy-2-propanol	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 107-98-2	COD	Non-applicable	Period	28 days
EC: 203-539-1	BOD5/COD	Non-applicable	% Biodegradable	90 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Camphene	BCF	1290
CAS: 79-92-5	Pow Log	4.22
EC: 201-234-8	Potential	Very High
3-iodo-2-propynyl Butylcarbamate	BCF	36
CAS: 55406-53-6	Pow Log	2.4
EC: 259-627-5	Potential	Moderate
1-methoxy-2-propanol	BCF	3
CAS: 107-98-2	Pow Log	-0.44
EC: 203-539-1	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Camphene	Koc	Non-applicable	Henry	Non-applicable
CAS: 79-92-5	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 201-234-8	Surface tension	1,098E-2 N/m (205,93 ºC)	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 (Regulation (EU) No 1357/2014)
20 01 27*	Paint, inks, adhesives and resins other than those mentioned in 20 01 27	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP4 Irritant — skin irritation and eye damage, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP13 Sensitising

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 (2014/955/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 recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) nº1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2015 and RID 2015:

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SECTION 14: TRANSPORT INFORMATION (continued)

14.1	**UN number:**	UN3082
14.2	**UN proper shipping name:**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate)
14.3	**Transport hazard class(es):**	9
	Labels:	9
14.4	**Packing group:**	III
14.5	**Dangerous for the environment:**	Yes
14.6	**Special precautions for user**	
	Special regulations:	274, 335, 375, 601
	Tunnel restriction code:	E
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 37-14:

14.1	**UN number:**	UN3082
14.2	**UN proper shipping name:**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate)
14.3	**Transport hazard class(es):**	9
	Labels:	9
14.4	**Packing group:**	III
14.5	**Dangerous for the environment:**	Yes
14.6	**Special precautions for user**	
	Special regulations:	274, 909
	EmS Codes:	F-A, S-F
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2015:

14.1	**UN number:**	UN3082
14.2	**UN proper shipping name:**	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl acrylate)
14.3	**Transport hazard class(es):**	9
	Labels:	9
14.4	**Packing group:**	III
14.5	**Dangerous for the environment:**	Yes
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Transport in bulk according to Annex II of Marpol and the IBC Code:**	Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains 3-iodo-2-propynyl Butylcarbamate.

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

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

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

Article 95, REGULATION (EU) No 528/2012: 3-iodo-2-propynyl Butylcarbamate (Product-type 6, 7, 8, 9, 10, 13)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

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SECTION 15: REGULATORY INFORMATION (continued)

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

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

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 product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

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) Nº 1907/2006 (Regulation (EC) Nº 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

CLP Regulation (EC) nº 1272/2008 (SECTION 2, SECTION 16):
· Supplementary information

Texts of the legislative phrases mentioned in section 2:

H411: Toxic to aquatic life with long lasting effects
H317: May cause an allergic skin reaction
H315: Causes skin irritation
H335: May cause respiratory irritation
H319: Causes serious eye irritation

Texts of the legislative phrases mentioned 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

CLP Regulation (EC) nº 1272/2008:

Acute Tox. 3: H331 - Toxic if inhaled
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
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects
Aquatic Chronic 4: H413 - May cause long lasting harmful effects to aquatic life
Eye Dam. 1: H318 - Causes serious eye damage
Eye Irrit. 2: H319 - Causes serious eye irritation
Flam. Liq. 3: H226 - Flammable liquid and vapour
Flam. Sol. 2: H228 - Flammable solid
Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin Irrit. 2: H315 - Causes skin irritation
Skin Sens. 1: H317 - May cause an allergic skin reaction
Skin Sens. 1A: H317 - May cause an allergic skin reaction
Skin Sens. 1B: H317 - May cause an allergic skin reaction
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure
STOT SE 3: H335 - May cause respiratory irritation
STOT SE 3: H336 - May cause drowsiness or dizziness

Classification procedure:

Aquatic Chronic 2: Calculation method
Skin Sens. 1A: Calculation method
Skin Irrit. 2: Calculation method
STOT SE 3: Calculation method
Eye Irrit. 2: Calculation method

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:

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

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
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol–water partition coefficient
Koc: Partition coefficient of organic carbon

- END OF SAFETY DATA SHEET -