




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

- 1.1 Product identifier:** UZIN 777 - Adhesive for rigid PVC pipes  
Art.No: 2-0779
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Adhesive. 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:**  
POLYCHIMIKI G. MATZIARIS S.A.  
14th Km Old National Rd Thessaloniki-Anchialos, Industrial Park of Anchialos  
POBox 1073, GR-57022 SINDOS Thessaloniki - Greece  
Phone.: +302310722991-2 - Fax: +302310722571  
uzin@otenet.gr  
www.uzin.gr
- 1.4 Emergency telephone number:** 210 7793777 Κέντρο Δηλητηριάσεων

## 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 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412  
Carc. 2: Carcinogenicity, Category 2, H351  
Eye Irrit. 2: Eye irritation, Category 2, H319  
Flam. Liq. 2: Flammable liquids, Category 2, H225  
Repr. 2: Reproductive toxicity, Category 2, H361d  
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008:**  
Danger
- 
- Hazard statements:**  
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects  
Carc. 2: H351 - Suspected of causing cancer  
Eye Irrit. 2: H319 - Causes serious eye irritation  
Flam. Liq. 2: H225 - Highly flammable liquid and vapour  
Repr. 2: H361d - Suspected of damaging the unborn child.  
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  
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  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308+P313: IF exposed or concerned: Get medical advice/attention  
P370+P378: In case of fire: Use ABC powder extinguisher to extinguish.  
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment
- Supplementary information:**  
EUH019: May form explosive peroxides  
EUH066: Repeated exposure may cause skin dryness or cracking
- Substances that contribute to the classification**  
Tetrahydrofuran (CAS: 109-99-9); Acetone (CAS: 67-64-1); Perchloroethylene (CAS: 127-18-4); Toluene (CAS: 108-88-3)

\*\* Changes with regards to the previous version

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## SECTION 2: HAZARDS IDENTIFICATION \*\* (continued)

### 2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

\*\* Changes with regards to the previous version

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substance:







Non-applicable

### 3.2 Mixture:

**Chemical description:** Mixture composed of resins in solvents

#### Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification			Concentration
CAS: 108-94-1 EC: 203-631-1 Index: 606-010-00-7 REACH: 01-2119453616-35-XXXX	<b>Cyclohexanone<sup>(1)</sup></b>	ATP CLP00		10 - <25 %
	Regulation 1272/2008 Acute Tox. 4: H332; Flam. Liq. 3: H226 - Warning			
CAS: 109-99-9 EC: 203-726-8 Index: 603-025-00-0 REACH: 01-2119444314-46-XXXX	<b>Tetrahydrofuran<sup>(1)</sup></b>	ATP ATP0		10 - <25 %
	Regulation 1272/2008 Carc. 2: H351; Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H335; EUH019 - Danger			
CAS: 67-64-1 EC: 200-662-2 Index: 606-001-00-8 REACH: 01-2119471330-49-XXXX	<b>Acetone<sup>(1)</sup></b>	ATP CLP00		10 - <25 %
	Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger			
CAS: 127-18-4 EC: 204-825-9 Index: 602-028-00-4 REACH: 01-2119475329-28-XXXX	<b>Perchloroethylene<sup>(1)</sup></b>	ATP CLP00		10 - <25 %
	Regulation 1272/2008 Aquatic Chronic 2: H411; Carc. 2: H351 - Warning			
CAS: 108-88-3 EC: 203-625-9 Index: 601-021-00-3 REACH: 01-2119471310-51-XXXX	<b>Toluene<sup>(1)</sup></b>	ATP CLP00		2,5 - <10 %
	Regulation 1272/2008 Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361d; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336 - Danger			
CAS: 78-93-3 EC: 201-159-0 Index: 606-002-00-3 REACH: 01-2119457290-43-XXXX	<b>2-butanone<sup>(2)</sup></b>	ATP CLP00		<1 %
	Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger			

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

<sup>(2)</sup> Substance with a Union workplace exposure limit

To obtain more information on the hazards 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:

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 lukewarm 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, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

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#### SECTION 4: FIRST AID MEASURES (continued)

**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:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>). 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 self-contained breathing apparatus (SCBA). 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. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, 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 inert medium. 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:**

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



## SECTION 7: HANDLING AND STORAGE (continued)

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

**PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT.** Transfer in designated areas that comply with the necessary safety conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to small amounts only. 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		
Cyclohexanone CAS: 108-94-1 EC: 203-631-1	IOELV (8h)	10 ppm	40.8 mg/m <sup>3</sup>	
	IOELV (STEL)	20 ppm	81.6 mg/m <sup>3</sup>	
	Year	2018		
Tetrahydrofuran CAS: 109-99-9 EC: 203-726-8	IOELV (8h)	50 ppm	150 mg/m <sup>3</sup>	
	IOELV (STEL)	100 ppm	300 mg/m <sup>3</sup>	
	Year	2018		
Acetone CAS: 67-64-1 EC: 200-662-2	IOELV (8h)	500 ppm	1210 mg/m <sup>3</sup>	
	IOELV (STEL)			
	Year	2018		
Perchloroethylene CAS: 127-18-4 EC: 204-825-9	IOELV (8h)	20 ppm	138 mg/m <sup>3</sup>	
	IOELV (STEL)	40 ppm	275 mg/m <sup>3</sup>	
	Year	2018		
Toluene CAS: 108-88-3 EC: 203-625-9	IOELV (8h)	50 ppm	192 mg/m <sup>3</sup>	
	IOELV (STEL)	100 ppm	384 mg/m <sup>3</sup>	
	Year	2018		
2-butanone CAS: 78-93-3 EC: 201-159-0	IOELV (8h)	200 ppm	600 mg/m <sup>3</sup>	
	IOELV (STEL)	300 ppm	900 mg/m <sup>3</sup>	
	Year	2018		

### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Cyclohexanone CAS: 108-94-1 EC: 203-631-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	4 mg/kg	Non-applicable	4 mg/kg	Non-applicable
	Inhalation	80 mg/m <sup>3</sup>	80 mg/m <sup>3</sup>	40 mg/m <sup>3</sup>	40 mg/m <sup>3</sup>

- CONTINUED ON NEXT PAGE -

**UZIN 777 - Adhesive for rigid PVC pipes**  
**Art.No: 2-0779**



**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Tetrahydrofuran CAS: 109-99-9 EC: 203-726-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	25 mg/kg	Non-applicable
	Inhalation	300 mg/m <sup>3</sup>	300 mg/m <sup>3</sup>	150 mg/m <sup>3</sup>	150 mg/m <sup>3</sup>
Acetone CAS: 67-64-1 EC: 200-662-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	186 mg/kg	Non-applicable
	Inhalation	Non-applicable	2420 mg/m <sup>3</sup>	1210 mg/m <sup>3</sup>	Non-applicable
Perchloroethylene CAS: 127-18-4 EC: 204-825-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	39,4 mg/kg	Non-applicable
	Inhalation	275 mg/m <sup>3</sup>	Non-applicable	138 mg/m <sup>3</sup>	Non-applicable
Toluene CAS: 108-88-3 EC: 203-625-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	384 mg/kg	Non-applicable
	Inhalation	384 mg/m <sup>3</sup>	384 mg/m <sup>3</sup>	192 mg/m <sup>3</sup>	192 mg/m <sup>3</sup>
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 <sup>3</sup>	Non-applicable

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Cyclohexanone CAS: 108-94-1 EC: 203-631-1	Oral	1,5 mg/kg	Non-applicable	1,5 mg/kg	Non-applicable
	Dermal	1 mg/kg	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	20 mg/m <sup>3</sup>	40 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	20 mg/m <sup>3</sup>
Tetrahydrofuran CAS: 109-99-9 EC: 203-726-8	Oral	Non-applicable	Non-applicable	15 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	15 mg/kg	Non-applicable
	Inhalation	150 mg/m <sup>3</sup>	150 mg/m <sup>3</sup>	62 mg/m <sup>3</sup>	75 mg/m <sup>3</sup>
Acetone CAS: 67-64-1 EC: 200-662-2	Oral	Non-applicable	Non-applicable	62 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	62 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	200 mg/m <sup>3</sup>	Non-applicable
Perchloroethylene CAS: 127-18-4 EC: 204-825-9	Oral	Non-applicable	Non-applicable	1,3 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	23 mg/kg	Non-applicable
	Inhalation	138 mg/m <sup>3</sup>	Non-applicable	34,5 mg/m <sup>3</sup>	Non-applicable
Toluene CAS: 108-88-3 EC: 203-625-9	Oral	Non-applicable	Non-applicable	8,13 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	226 mg/kg	Non-applicable
	Inhalation	226 mg/m <sup>3</sup>	226 mg/m <sup>3</sup>	56,5 mg/m <sup>3</sup>	56,5 mg/m <sup>3</sup>
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 <sup>3</sup>	Non-applicable

**PNEC:**

Identification					
Cyclohexanone CAS: 108-94-1 EC: 203-631-1	STP	10 mg/L	Fresh water	0,0329 mg/L	
	Soil	0,0143 mg/kg	Marine water	0,00329 mg/L	
	Intermittent	0,329 mg/L	Sediment (Fresh water)	0,168 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0,0168 mg/kg	
Tetrahydrofuran CAS: 109-99-9 EC: 203-726-8	STP	4,6 mg/L	Fresh water	4,32 mg/L	
	Soil	2,13 mg/kg	Marine water	0,432 mg/L	
	Intermittent	21,6 mg/L	Sediment (Fresh water)	23,3 mg/kg	
	Oral	67 g/kg	Sediment (Marine water)	2,33 mg/kg	
Acetone CAS: 67-64-1 EC: 200-662-2	STP	100 mg/L	Fresh water	10,6 mg/L	
	Soil	29,5 mg/kg	Marine water	1,06 mg/L	
	Intermittent	21 mg/L	Sediment (Fresh water)	30,4 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	3,04 mg/kg	

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Perchloroethylene CAS: 127-18-4 EC: 204-825-9	STP	11,2 mg/L	Fresh water	0,051 mg/L
	Soil	0,01 mg/kg	Marine water	0,0051 mg/L
	Intermittent	0,0364 mg/L	Sediment (Fresh water)	0,903 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0903 mg/kg
Toluene CAS: 108-88-3 EC: 203-625-9	STP	13,61 mg/L	Fresh water	0,68 mg/L
	Soil	2,89 mg/kg	Marine water	0,68 mg/L
	Intermittent	0,68 mg/L	Sediment (Fresh water)	16,39 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	16,39 mg/kg
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

### 8.2 Exposure controls:

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

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective 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	 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	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.

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted 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	Face mask	 CAT II	EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

#### E.- Body protection



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	 CAT III	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	 CAT III	EN 13287:2008 EN ISO 20345:2011 EN 13832-1:2006	Replace boots at any sign of deterioration.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

### 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):	76,92 % weight
V.O.C. density at 20 °C:	773,22 kg/m <sup>3</sup> (773,22 g/L)
Average carbon number:	4,25
Average molecular weight:	89,1 g/mol

## 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:	Colorless
Colour:	Colourless
Odour:	Acetona
Odour threshold:	Non-applicable *

#### Volatility:

Boiling point at atmospheric pressure:	56 - 156 °C
Vapour pressure at 20 °C:	14442 Pa
Vapour pressure at 50 °C:	48741 Pa (49 kPa)
Evaporation rate at 20 °C:	Non-applicable *

#### Product description:

Density at 20 °C:	1005 kg/m <sup>3</sup>
Relative density at 20 °C:	1,005
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
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 properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *

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

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Oxidising properties: Non-applicable \*

### Flammability:

Flash Point: -1 °C  
Flammability (solid, gas): Non-applicable \*  
Autoignition temperature: 321 °C  
Lower flammability limit: Not available  
Upper flammability limit: Not available

### Explosive:

Lower explosive limit: Non-applicable \*  
Upper explosive limit: Non-applicable \*

### 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 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.

### 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	Combustible 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 (CO<sub>2</sub>), 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

#### Dangerous health implications:

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

#### A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: 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.

#### B- Inhalation (acute effect):

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## SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- 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: 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.
- C- Contact with the skin and the eyes (acute effect):
  - Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for skin contact. For more information see section 3.
  - Contact with the eyes: Produces eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
  - Carcinogenicity: Exposure to this product can cause cancer. For more specific information on the possible health effects see section 2.
  - 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: Suspected of damaging the unborn child.
- E- Sensitizing effects:
  - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
  - Cutaneous: 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.
- F- Specific target organ toxicity (STOT) - single exposure:
 

Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- 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: 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
Cyclohexanone	LD50 oral	2650 mg/kg	Rat
CAS: 108-94-1	LD50 dermal	3160 mg/kg	Rabbit
EC: 203-631-1	LC50 inhalation	11 mg/L (4 h)	Rat
Tetrahydrofuran	LD50 oral	3000 mg/kg	Rat
CAS: 109-99-9	LD50 dermal	>2000 mg/kg	
EC: 203-726-8	LC50 inhalation	>20 mg/L (4 h)	
Acetone	LD50 oral	5800 mg/kg	Rat
CAS: 67-64-1	LD50 dermal	7426 mg/kg	Rabbit
EC: 200-662-2	LC50 inhalation	76 mg/L (4 h)	Rat
Perchloroethylene	LD50 oral	2400 mg/kg	Rat
CAS: 127-18-4	LD50 dermal	>2000 mg/kg	
EC: 204-825-9	LC50 inhalation	20,2 mg/L (4 h)	Mouse
Toluene	LD50 oral	5580 mg/kg	Rat
CAS: 108-88-3	LD50 dermal	12124 mg/kg	Rat
EC: 203-625-9	LC50 inhalation	28,1 mg/L (4 h)	Rat
2-butanone	LD50 oral	4000 mg/kg	Rat
CAS: 78-93-3	LD50 dermal	6400 mg/kg	Rabbit
EC: 201-159-0	LC50 inhalation	23,5 mg/L (4 h)	Rat

## SECTION 12: ECOLOGICAL INFORMATION

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## SECTION 12: ECOLOGICAL INFORMATION (continued)

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

### 12.1 Toxicity:

Identification		Acute toxicity	Species	Genus
Cyclohexanone	LC50	527 mg/L (96 h)	Pimephales promelas	Fish
CAS: 108-94-1	EC50	800 mg/L (24 h)	Daphnia magna	Crustacean
EC: 203-631-1	EC50	370 mg/L (192 h)	Scenedesmus quadricauda	Algae
Tetrahydrofuran	LC50	2160 mg/L (96 h)	Pimephales promelas	Fish
CAS: 109-99-9	EC50	Non-applicable		
EC: 203-726-8	EC50	Non-applicable		
Acetone	LC50	5540 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 67-64-1	EC50	23.5 mg/L (48 h)	Daphnia magna	Crustacean
EC: 200-662-2	EC50	3400 mg/L (48 h)	Chlorella pyrenoidosa	Algae
Perchloroethylene	LC50	4.99 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 127-18-4	EC50	3.2 mg/L (24 h)	Daphnia magna	Crustacean
EC: 204-825-9	EC50	500 mg/L (96 h)	Skeletonema costatum	Algae
Toluene	LC50	13 mg/L (96 h)	Carassius auratus	Fish
CAS: 108-88-3	EC50	11.5 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-625-9	EC50	125 mg/L (48 h)	Scenedesmus subspicatus	Algae
2-butanone	LC50	3220 mg/L (96 h)	Pimephales promelas	Fish
CAS: 78-93-3	EC50	5091 mg/L (48 h)	Daphnia magna	Crustacean
EC: 201-159-0	EC50	4300 mg/L (168 h)	Scenedesmus quadricauda	Algae

### 12.2 Persistence and degradability:

Identification		Degradability		Biodegradability
Cyclohexanone	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 108-94-1	COD	Non-applicable	Period	14 days
EC: 203-631-1	BOD5/COD	0.65	% Biodegradable	87 %
Tetrahydrofuran	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 109-99-9	COD	Non-applicable	Period	14 days
EC: 203-726-8	BOD5/COD	Non-applicable	% Biodegradable	100 %
Acetone	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 67-64-1	COD	Non-applicable	Period	28 days
EC: 200-662-2	BOD5/COD	0.96	% Biodegradable	96 %
Perchloroethylene	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 127-18-4	COD	Non-applicable	Period	28 days
EC: 204-825-9	BOD5/COD	Non-applicable	% Biodegradable	11 %
Toluene	BOD5	2.5 g O2/g	Concentration	100 mg/L
CAS: 108-88-3	COD	Non-applicable	Period	14 days
EC: 203-625-9	BOD5/COD	Non-applicable	% Biodegradable	100 %
2-butanone	BOD5	2.03 g O2/g	Concentration	Non-applicable
CAS: 78-93-3	COD	2.31 g O2/g	Period	20 days
EC: 201-159-0	BOD5/COD	0.88	% Biodegradable	89 %

### 12.3 Bioaccumulative potential:

Identification		Bioaccumulation potential
Cyclohexanone	BCF	2
CAS: 108-94-1	Pow Log	0.81
EC: 203-631-1	Potential	Low
Tetrahydrofuran	BCF	3
CAS: 109-99-9	Pow Log	0.46
EC: 203-726-8	Potential	Low
Acetone	BCF	1
CAS: 67-64-1	Pow Log	-0.24
EC: 200-662-2	Potential	Low

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## SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Bioaccumulation potential	
Perchloroethylene	BCF	77
CAS: 127-18-4	Pow Log	2.53
EC: 204-825-9	Potential	Moderate
Toluene	BCF	13
CAS: 108-88-3	Pow Log	2.73
EC: 203-625-9	Potential	Low
2-butanone	BCF	3
CAS: 78-93-3	Pow Log	0.29
EC: 201-159-0	Potential	Low

### 12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Cyclohexanone	Koc	17	Henry	9,119E-1 Pa·m <sup>3</sup> /mol
CAS: 108-94-1	Conclusion	Very High	Dry soil	Yes
EC: 203-631-1	Surface tension	3,437E-2 N/m (25 °C)	Moist soil	Yes
Tetrahydrofuran	Koc	23	Henry	7,19 Pa·m <sup>3</sup> /mol
CAS: 109-99-9	Conclusion	Very High	Dry soil	Yes
EC: 203-726-8	Surface tension	2,498E-2 N/m (25 °C)	Moist soil	Yes
Acetone	Koc	1	Henry	2,93 Pa·m <sup>3</sup> /mol
CAS: 67-64-1	Conclusion	Very High	Dry soil	Yes
EC: 200-662-2	Surface tension	2,304E-2 N/m (25 °C)	Moist soil	Yes
Perchloroethylene	Koc	Non-applicable	Henry	Non-applicable
CAS: 127-18-4	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 204-825-9	Surface tension	3,165E-2 N/m (25 °C)	Moist soil	Non-applicable
Toluene	Koc	178	Henry	672,8 Pa·m <sup>3</sup> /mol
CAS: 108-88-3	Conclusion	Moderate	Dry soil	Yes
EC: 203-625-9	Surface tension	2,793E-2 N/m (25 °C)	Moist soil	Yes
2-butanone	Koc	30	Henry	5,77 Pa·m <sup>3</sup> /mol
CAS: 78-93-3	Conclusion	Very High	Dry soil	Yes
EC: 201-159-0	Surface tension	2,396E-2 N/m (25 °C)	Moist soil	Yes

### 12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

### 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)
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances	Dangerous

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

HP14 Ecotoxic, HP3 Flammable, HP15 Waste capable of exhibiting a hazardous property listed above not directly displayed by the original waste, HP4 Irritant — skin irritation and eye damage, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP7 Carcinogenic, HP10 Toxic for reproduction

#### 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) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

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## SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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 2017 and RID 2017:



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

### Transport of dangerous goods by sea:

With regard to IMDG 38-16:



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

### Transport of dangerous goods by air:

With regard to IATA/ICAO 2017:



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

## SECTION 15: REGULATORY INFORMATION

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

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## SECTION 15: REGULATORY INFORMATION (continued)

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

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

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 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, etc ....):**

Contains more than 0.1 % of Toluene by weight. Shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than 0,1 % by weight where the substance or mixture is used in adhesives or spray paints intended for supply to the general public.

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,
- "whoopie" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

'For professional users only'.

Regulation (EU) No 98/2013 of the European Parliament and of the Council of 15 January 2013 on the marketing and use of explosives precursors: Contains Acetone. Product under the provisions of Article 9

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 a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, 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):

- Precautionary statements

### **Texts of the legislative phrases mentioned in section 2:**

- H319: Causes serious eye irritation
- H351: Suspected of causing cancer
- H336: May cause drowsiness or dizziness
- H412: Harmful to aquatic life with long lasting effects
- H361d: Suspected of damaging the unborn child.
- H225: Highly flammable liquid and vapour

### **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

- CONTINUED ON NEXT PAGE -



## SECTION 16: OTHER INFORMATION (continued)

### CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H332 - Harmful if inhaled  
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  
Flam. Liq. 3: H226 - Flammable liquid and vapour  
Repr. 2: H361d - Suspected of damaging the unborn child.  
Skin Irrit. 2: H315 - Causes skin irritation  
STOT RE 2: H373 - May cause 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:

Eye Irrit. 2: Calculation method  
Carc. 2: Calculation method  
STOT SE 3: Calculation method  
Aquatic Chronic 3: Calculation method  
Repr. 2: Calculation method  
Flam. Liq. 2: Calculation method (2.6.4.3)

### Advice related to training:

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

### Principal bibliographical sources:

<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