



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

1.1 Product identifier: HYDROSEAL

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

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: Ravago Hellas SA, Building and Construction Head Office: Lefkis str. 111, Kryoneri Attica. Plant: ARMA - VIOTIAS, Place 'STATION' Head Office PO: 14568, Plant PO: 32200 - GREECE Phone: Head Office: 0030 2108161857. Plant: 0030 2262072083 Fax: Head Office: 0030 2108161131. Plant: 0030 2262072183 info@ravagohellas.gr www.ravagohellas.gr
- 1.4 Emergency telephone number:

SECTION 2: HAZARDS IDENTIFICATION **

2.1 Classification of the substance or mixture:

CLP Regulation (EC) n° 1272/2008:

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

Acute Tox. 4: Acute toxicity, Category 4, H312+H332

Resp. Sens. 1: Sensitisation, respiratory, Category 1, H334

2.2 Label elements:

CLP Regulation (EC) n° 1272/2008:

Danger



Hazard statements:

Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled **Precautionary statements:**

P101: If medical advice is needed, have product container or label at hand

P102: Keep out of reach of children

P271: Use only outdoors or in a well-ventilated area

- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P302+P352: IF ON SKIN: Wash with plenty of water

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

P501: Dispose of contents and / or their container according to the separated collection system used in your municipality

Supplementary information:

EUH204: Contains isocyanates. May produce an allergic reaction

Substances that contribute to the classification

Xylene (mixture of isomers); 4,4'-methylenediphenyl diisocyanate

Additional Labelling (Annex XVII, REACH):

Persons already sensitised to diisocyanates may develop allergic reactions when using this product.

Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard FN 14387) is used

2.3 Other hazards:

Non-applicable

** 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 polyurethane in solvents

Components:

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

Identification		Chemical name/Classification	Conce	entrat
CAS: 1330-20-7 EC: 215-535-7	Xylene (mixture of Regulation		2,5 -	· <10
Inde 601-022-00-9	-	H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT RE 2:	9	
CAS: 101-68-8	4,4´-methylenedip	henyl diisocyanate ATP CLP00		
EC: 202-966-0 Inde 615-005-00-9	Regulation 1272/2008	Acute Tox. 4: H332; Carc. 2: H351; Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT	<1	%
CAS: 2530-83-8	[3-(2,3-epoxyprop	oxy)propyl]trimethoxysilane Self-		
EC: 219-784-2 Inde Non-applicable	Regulation 1272/2008	Eye Dam. 1: H318 - Danger	<1	%
CAS: 52829-07-9	Bis(2,2,6,6-tetra	nethyl-4-piperidyl) sebacate Self-		
EC: 258-207-9 Inde Non-applicable	-	Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Eye Dam. 1: H318 - Danger	<1	%
CAS: 77-58-7	Dibutyltin Dilaurat	e Self-		
EC: 201-039-8 Inde Non-applicable	-	Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Muta. 2: H341; Repr. 1B: H360; Skin Corr. 1C: H314; Skin Sens.	<1	%

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:

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, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as guickly as possible with the SDS of the 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





SECTION 5: FIREFIGHTING MEASURES (continued)

5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use, containing flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED 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:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

6.2 Environmental precautions:

Avoid spillage into an aqueous medium as it contains substances potentially dangerous for this. Contain the product absorbed in hermetically sealed containers. In the case of serious spillage into an aqueous medium notify the relevant authority.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

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

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.

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

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal See sections 8 and 13.

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





SECTION 7: HANDLING AND STORAGE (continued)

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	Envi	ronmental limit	S
Xylene (mixture of isomers)	IOELV (8h)	50 ppm	221 mg/m³
CAS: 1330-20-7	IOELV (STEL)	100 ppm	442 mq/m³
EC: 215-535-7	Year	2015	

Nuisance dust: Inhalable dust 10 mg/m3 // Respirable dust 4 mg/m3 DNEL (Workers):

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
Xylene (mixture of isomers)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	289 mg/m ³	289 mg/m ³	77 mg/m ³	Non-applicable
4,4´-methylenediphenyl diisocyanate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 101-68-8	Dermal	50 mg/kg	Non-applicable	Non-applicable	Non-applicable
EC: 202-966-0	Inhalation	0,1 mg/m ³	0,1 mg/m ³	0,05 mg/m³	0,05 mg/m ³
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 2530-83-8	Dermal	Non-applicable	Non-applicable	21 mg/kg	Non-applicable
EC: 219-784-2	Inhalation	Non-applicable	Non-applicable	147 mg/m ³	Non-applicable
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 52829-07-9	Dermal	2 mg/kg	Non-applicable	2 mg/kg	Non-applicable
EC: 258-207-9	Inhalation	5,6 mg/m ³	Non-applicable	5,6 mg/m³	Non-applicable
Dibutyltin Dilaurate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 77-58-7	Dermal	1 mg/kg	Non-applicable	0,2 mg/kg	Non-applicable
EC: 201-039-8	Inhalation	0,07 mg/m ³	Non-applicable	0,01 mg/m ³	Non-applicable

DNEL (General population):

		Short e	xposure	Long ex	kposure
Identification		Systemic	Local	Systemic	Local
Xylene (mixture of isomers)	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	108 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	Non-applicable	Non-applicable	14,8 mg/m ³	Non-applicable
4,4´-methylenediphenyl diisocyanate	Oral	20 mg/kg	Non-applicable	Non-applicable	Non-applicable
CAS: 101-68-8	Dermal	25 mg/kg	Non-applicable	Non-applicable	Non-applicable
EC: 202-966-0	Inhalation	0,05 mg/m³	0,05 mg/m³	0,025 mg/m 3	0,025 mg/m 3
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	Oral	Non-applicable	Non-applicable	12,5 mg/kg	Non-applicable
CAS: 2530-83-8	Dermal	Non-applicable	Non-applicable	12,5 mg/kg	Non-applicable
EC: 219-784-2	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	Oral	1 mg/kg	Non-applicable	1 mg/kg	Non-applicable
CAS: 52829-07-9	Dermal	1 mg/kg	Non-applicable	1 mg/kg	Non-applicable
EC: 258-207-9	Inhalation	1,4 mg/m ³	Non-applicable	1,4 mg/m ³	Non-applicable
Dibutyltin Dilaurate	Oral	0,01 mg/kg	Non-applicable	0,002 mg/kg	Non-applicable
CAS: 77-58-7	Dermal	0,5 mg/kg	Non-applicable	0,08 mg/kg	Non-applicable
EC: 201-039-8	Inhalation	0,02 mg/m³	Non-applicable	0,003 mg/m ³	Non-applicable

PNEC:





SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Xylene (mixture of isomers)	STP	6,58 mg/L	Fresh water	0,327 mg/L
CAS: 1330-20-7	Soil	2,31 mg/kg	Marine water	0,327 mg/L
EC: 215-535-7	Intermittent	0,327 mg/L	Sediment (Fresh water)	12,46 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	12,46 mg/kg
4,4´-methylenediphenyl diisocyanate	STP	1 mg/L	Fresh water	1 mg/L
CAS: 101-68-8	Soil	1 mg/kg	Marine water	0,1 mg/L
EC: 202-966-0	Intermittent	10 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	STP	10 mg/L	Fresh water	1 mg/L
CAS: 2530-83-8	Soil	0,14 mg/kg	Marine water	0,1 mg/L
EC: 219-784-2	Intermittent	1 mg/L	Sediment (Fresh water)	3,6 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,36 mg/kg
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	STP	1 mg/L	Fresh water	0,005 mg/L
CAS: 52829-07-9	Soil	1,6 mg/kg	Marine water	0,0005 mg/L
EC: 258-207-9	Intermittent	0,011 mg/L	Sediment (Fresh water)	8,02 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,802 mg/kg
Dibutyltin Dilaurate	STP	100 mg/L	Fresh water	0,000463 mg/L
CAS: 77-58-7	Soil	Non-applicable	Marine water	0,0000463 mg/L
EC: 201-039-8	Intermittent	0,00463 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	0,2 g/kg	Sediment (Marine water)	Non-applicable

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 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

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory respiratory	Filter mask for gases, vapours and particles		EN 149:2001+A1:2009 EN 405:2001+A1:2009	Replace when an increase in resistence 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	NON-disposable chemical protective gloves		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 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	Face mask		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.- Bodily protection





Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory	Disposable clothing for protection against chemical risks		EN 13034:2005+A1:2009 EN 168:2001 EN ISO 13982- 1:2004/A1:2010	For professional use only. Clear periodically according to the manufacturer's instructions.
Mandatory foot	Safety footwear for protection against chemical risk		EN ISO 20345:2011 EN 13832-1:2006	Replace boots at any sign of deterioration.

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

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):	7 % weight
V.O.C. density at 20 °C:	Non-applicable
Average carbon number:	8
Average molecular weight:	106,2 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:	Solid
Appearance:	Paste
Colour:	White
Odour:	Aromatic
Odour threshold:	Non-applicable *
Volatility:	
Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 20 °C:	Non-applicable *
Vapour pressure at 50 °C:	<300000 Pa (300 kPa)
Evaporation rate at 20 °C:	Non-applicable *
Product description:	
Density at 20 °C:	Non-applicable *
Relative density at 20 °C:	1,25
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>20,5 cSt
*Not valariant due to the veture of the weadret wat v	was information property of its

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





SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)					
Concentration:	Non-applicable *				
рН:	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:	Insoluble in water, soluble in organic solvents				
Decomposition temperature:	Non-applicable *				
Melting point/freezing point:	Non-applicable *				
Explosive properties:	Non-applicable *				
Oxidising properties:	Non-applicable *				
Flammability:					
Flash Point:	Non-applicable				
Flammability (solid, gas):	Non-applicable *				
Autoignition temperature:	Non-applicable *				
Lower flammability limit:	Non-applicable *				
Upper flammability 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	Precaution	Precaution	Not applicable
10.5	Incompatible materials:				
	A من ما م	\A/atax	Combustive meterials	Combustible meterials	Others

Acids	Water	Combustive materials	Combustible materials	Others	
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong	
 11 1 1					

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

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:





SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- 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 danaerous for this effect. For more information see section 3
- B- Inhalation (acute effect):
 - Acute toxicity : Exposure in high concentration can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met, however it does contain substances classified as danaerous for this effect. For more information see section 3.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Above all, may have harmful effects for health if the product is absorbed through the skin. For more information on the secondary effects of contact with the skin see section 2.
 - Contact with the eyes: Based on available data, the classification criteria are not met, however it does contain
 - substances classified as danaerous for this effect. For more information see section 3
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: 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.
 - Mutagenicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous with mutagenic effects. For more information see section 3.
 - Reproductive toxicity: 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. E- Sensitizing effects:
- - Respiratory: Prolonged exposure can result in specific respiratory hypersensitivity.
 - Cutaneous: 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.
- F- Specific target organ toxicity (STOT) single exposure:

Based on available data, the classification criteria are not met, however, it does contain substances which are classified as dangerous as a result of a single exposure. For more information see section 3.

- 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 classified as danaerous for this effect. 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 danaerous for this effect. For more information see section 3
- 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	entification Acute toxicity		Genus
Xylene (mixture of isomers)	LD50 oral	2100 mg/kg	Rat
CAS: 1330-20-7	LD50 dermal	1100 mg/kg (ATEi)	Rat
EC: 215-535-7	LC50 inhalation	1,5 mg/L (4 h) (ATEi)	
4,4´-methylenediphenyl diisocyanate	LD50 oral	7616 mg/kg	Rat
CAS: 101-68-8	LD50 dermal	10000 mg/kg	Rabbit
EC: 202-966-0	LC50 inhalation	Non-applicable	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	LD50 oral	8025 mg/kg	Rat
CAS: 2530-83-8	LD50 dermal	4250 mg/kg	Rabbit
EC: 219-784-2	LC50 inhalation	Non-applicable	
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	LD50 oral	3700 mg/kg	Rat
CAS: 52829-07-9	LD50 dermal	Non-applicable	
EC: 258-207-9	LC50 inhalation	Non-applicable	
Dibutyltin Dilaurate	LD50 oral	175 mg/kg	Rat
CAS: 77-58-7	LD50 dermal	Non-applicable	
EC: 201-039-8	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
Xylene (mixture of isomers)	LC50	13.5 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 1330-20-7	EC50	0.6 mg/L (96 h)	Gammarus lacustris	Crustacean
EC: 215-535-7	EC50	10 mg/L (72 h)	Skeletonema costatum	Algae
4,4´-methylenediphenyl diisocyanate CAS: 101-68-8	L <i>C</i> 50 E <i>C</i> 50	1000 mg/L (96 h) Non-applicable	Brachydanio rerio	Fish
EC: 202-966-0	EC50	Non-applicable		
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	LC50	55 mg/L (96 h)	Cyprinus carpio	Fish
CAS: 2530-83-8	EC50	324 mg/L (48 h)	Daphnia magna	Crustacean
EC: 219-784-2	EC50	Non-applicable		
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	LC50	5.3 mg/L (96 h)	Oryzias latipes	Fish
CAS: 52829-07-9	EC50	8.6 mg/L (48 h)	Daphnia magna	Crustacean
EC: 258-207-9	EC50	0.7 mg/L (72 h)	Pseudokirchneriella	Algae
Dibutyltin Dilaurate	LC50	0.1 - 1 mg/L (96 h)		Fish
CAS: 77-58-7	EC50	0.1 - 1 mg/L		Crustacean
EC: 201-039-8	EC50	0.1 - 1 mg/L		Algae

12.2 Persistence and degradability:

Identification	Degro	dability	Biodegrada	oility
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate	BOD5	Non-applicable	Concentration	20 mg/L
CAS: 52829-07-9	COD	Non-applicable	Period	28 days
EC: 258-207-9	BOD5/COD	Non-applicable	% Biodegradable	29 %
Dibutyltin Dilaurate	BOD5	0.00054 g O2/g	Concentration	100 mg/L
CAS: 77-58-7	COD	Non-applicable	Period	28 days
EC: 201-039-8	BOD5/COD	Non-applicable	% Biodegradable	50 %

12.3 Bioaccumulative potential:

Identification		Bioaccumulation potential	
Xylene (mixture of isomers)	BCF	9	
CAS: 1330-20-7	Pow Log	2.77	
EC: 215-535-7	Potential	Low	
4,4´-methylenediphenyl diisocyanate	BCF	150	
CAS: 101-68-8	Pow Log	4.51	
EC: 202-966-0	Potential	High	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	BCF		
CAS: 2530-83-8	Pow Log	0.5	
EC: 219-784-2	Potential		
Dibutyltin Dilaurate	BCF	31	
CAS: 77-58-7	Pow Log	3.12	
EC: 201-039-8	Potential	Moderate	

12.4 Mobility in soil:

Identification	Absor	Absorption/desorption		Volatility
4,4´-methylenediphenyl diisocyanate	Кос	Non-applicable	Henry	Non-applicable
CAS: 101-68-8	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 202-966-0	Surface	2,068E-2 N/m	Moist soil	Non-applicable
	tension	(283 45 °C)		

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)
08 04 10	Waste adhesives and sealants other than those mentioned in 08 04 09	Non dangerous

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

Non-applicable

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) n°1907/2006 (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

This product is not regulated for transport (ADR/RID,IMDG,IATA)

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

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: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Contains Dibutyltin Dilaurate

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

Contains Di-´´isononyl´´ phthalate. This product may not be used in childrens' games or items if the final Di-´´isononyl´´ phthalate concentration is greater than 0.1 in the weight of plasitcised material.

Contains more than 0.1 % of 4,4'-methylenediphenyl diisocyanate by weight. This product may not be distributed in its present form for first-time sale to the general public after 27th December 2010 unless the packaging contains protective gloves meeting the provisions of European Council Directive 89/686/CEE

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 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° 2015/830)

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





SECTION 16: OTHER INFORMATION (continued) CLP Regulation (EC) nº 1272/2008 (SECTION 2, SECTION 16): · Precautionary statements Texts of the legislative phrases mentioned in section 2: H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled H312+H332: Harmful in contact with skin or if inhaled 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, 4: H312+H332 - Harmful in contact with skin or if inhaled Acute Tox. 4: H332 - Harmful if inhaled 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 Dam. 1: H318 - Causes serious eye damage Eye Irrit. 2: H319 - Causes serious eye irritation Flam. Lig. 3: H226 - Flammable liquid and vapour Muta. 2: H341 - Suspected of causing genetic defects Repr. 1B: H360 - May damage fertility or the unborn child Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled Skin Corr. 1C: H314 - Causes severe skin burns and eye damage Skin Irrit. 2: H315 - Causes skin irritation Skin Sens. 1: H317 - May cause an allergic skin reaction STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure. (Oral) STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral) Classification procedure: Resp. Sens. 1: Calculation method Acute Tox. 4: 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: 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

The information contained in this safety 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 - END OF SAFETY DATA SHEET -