DECOFIN POLYURETHANE (B)

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

1.1 Product identifier: DECOFIN POLYURETHANE (B)

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

Relevant uses: Hardener for coatings

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:

DUROSTICK SA
PATIMA KOROREMI
193 00 ASPROPIRGOS, ATTICA - GREECE
Phone.: 211 60 03 500-599 -
Fax: 210 55 99 612
info@durostick.gr
www.durostick.gr

1.4 Emergency telephone number: 210 7793 777

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

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

This product was classified in accordance with Directive 67/548/EC and Directive 1999/45/EC, adapting the requirements to Regulation (EC) nº1907/2006 (REACH regulation).

Xi: R37/38 - Irritating to respiratory system and skin, R43 - May cause sensitisation by skin contact
Xn: R20/21 - Harmful by inhalation and in contact with skin
R10 - Flammable
R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

CLP Regulation (EC) nº 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
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3
Flam. Liq. 3: Flammable liquids, Category 3
Skin Irrit. 2: Skin irritation, Category 2
Skin Sens. 1: Sensitisation, skin, Category 1
STOT RE 2: Specific target organ toxicity, repeated exposure, Category 2
STOT SE 3: Respiratory tract toxicity, single exposure, Category 3

2.2 Label elements:

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

In accordance with the legislation, the elements on the label are as follows:

Harmful

R Phrases:

R10: Flammable
R20/21: Harmful by inhalation and in contact with skin
R37/38: Irritating to respiratory system and skin
R43: May cause sensitisation by skin contact
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S Phrases:

S2: Keep out of the reach of children
S36/37: Wear suitable protective clothing and gloves
S43: In case of fire, use polyvalent powder ABC
S46: If swallowed, seek medical advice immediately and show this container or label

Supplementary information:

P91: Contains isocyanates-Read the information provided by the manufacturer

Substances that contribute to the classification:

Hexamethylene diisocyanate, oligomers; Xylene (mixture of isomers)

- CONTINUED ON NEXT PAGE -

SECTION 2: HAZARDS IDENTIFICATION (continue)

CLP Regulation (EC) nº 1272/2008:

Warning

Hazard statements:

Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects
Flam. Liq. 3: H226 - Flammable liquid and vapour
Skin Irrit. 2: H315 - Causes skin irritation
Skin Sens. 1: H317 - May cause an allergic skin reaction
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure
STOT SE 3: H335 - May cause respiratory irritation

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand
P102: Keep out of reach of children
P103: Read label before use
P280: Wear protective gloves/protective clothing/eye protection/face protection
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
P333+P313: If skin irritation or rash occurs: Get medical advice/attention
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
EUH208: Contains Hexamethylene diisocyanate, Hexamethylene diisocyanate, oligomers. May produce an allergic reaction

Substances that contribute to the classification

Xylene (mixture of isomers); Hexamethylene diisocyanate, oligomers; Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

2.3 Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical description: Isocyanate/s

Components:

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

Identification	Chemical name/Classification		Concentration
CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH: 01-2119488216-32-XXXX	**Xylene (mixture of isomers)**	ATP CLP00	**24 - <75 %**
	Directive 67/548/EC	Xi: R38; Xn: R20/21; R10	
	Regulation 1272/2008	Acute Tox. 4: H312+H332; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Warning	
CAS: 28182-81-2 EC: 931-274-8 Index: Non-applicable REACH: 01-2119485796-17-XXXX	**Hexamethylene diisocyanate, oligomers**		**24 - <75 %**
	Directive 67/548/EC	Xi: R37, R43; Xn: R20	
	Regulation 1272/2008	Acute Tox. 4: H332; Skin Sens. 1: H317; STOT SE 3: H335 - Warning	
CAS: Non-applicable EC: 919-446-0 Index: Non-applicable REACH: 01-2119458049-33-XXXX	**Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)**		**2,4 - <4,9 %**
	Directive 67/548/EC	N: R51/53; Xn: R48/20, R65; R10; R66; R67	
	Regulation 1272/2008	Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT RE 1: H372; STOT SE 3: H336 - Danger	
CAS: 100-41-4 EC: 202-849-4 Index: 601-023-00-4 REACH: 01-2119489370-35-XXXX	**Ethylbenzene**	ATP ATP06	**0,24 - <0,9 %**
	Directive 67/548/EC	F: R11; Xn: R20, R48/20, R65	
	Regulation 1272/2008	Acute Tox. 4: H332; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT RE 2: H373 - Danger	
CAS: 822-06-0 EC: 212-485-8 Index: 615-011-00-1 REACH: 01-2119457571-37-XXXX	**Hexamethylene diisocyanate**	ATP CLP00	**0,09 - <0,24 %**
	Directive 67/548/EC	T: R23; Xi: R36/37/38; Xn: R42/43	
	Regulation 1272/2008	Acute Tox. 3: H331; Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Irrit. 2: H315; Skin Sens. 1: H317; STOT SE 3: H335 - Danger	

- CONTINUED ON NEXT PAGE -

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continue)

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

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

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

By inhalation:

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

By skin contact:

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

By eye contact:

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

By consumption:

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

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

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

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

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

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive subproducts 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 inflamation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

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

- CONTINUED ON NEXT PAGE -

SECTION 6: ACCIDENTAL RELEASE MEASURES (continue)

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,…) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 94/9/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to used 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

Maximun Temp.: 30 ºC

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		
Xylene (mixture of isomers)	IOELV (8h)	50 ppm	221 mg/m³
CAS: 1330-20-7	IOELV (STEL)	100 ppm	442 mg/m³
EC: 215-535-7	Year	2014	
Ethylbenzene	IOELV (8h)	100 ppm	442 mg/m³
CAS: 100-41-4	IOELV (STEL)	200 ppm	884 mg/m³
EC: 202-849-4	Year	2014	

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

DNEL (Workers):

Identification		Short exposure		Long exposure	
		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/m³	289 mg/m³	77 mg/m³	Non-applicable
Hexamethylene diisocyanate, oligomers	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 28182-81-2	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 931-274-8	Inhalation	Non-applicable	1 mg/m³	Non-applicable	0,5 mg/m³
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: Non-applicable	Dermal	Non-applicable	Non-applicable	44 mg/kg	Non-applicable
EC: 919-446-0	Inhalation	Non-applicable	Non-applicable	330 mg/m³	Non-applicable
Ethylbenzene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 100-41-4	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
EC: 202-849-4	Inhalation	Non-applicable	293 mg/m³	77 mg/m³	Non-applicable
Hexamethylene diisocyanate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 822-06-0	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 212-485-8	Inhalation	0,07 mg/m³	0,07 mg/m³	0,035 mg/m³	0,035 mg/m³

DNEL (Population):

Identification		Short exposure		Long exposure	
		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/m³	Non-applicable
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Oral	Non-applicable	Non-applicable	26 mg/kg	Non-applicable
CAS: Non-applicable	Dermal	Non-applicable	Non-applicable	26 mg/kg	Non-applicable
EC: 919-446-0	Inhalation	Non-applicable	Non-applicable	71 mg/m³	Non-applicable
Ethylbenzene	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
CAS: 100-41-4	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 202-849-4	Inhalation	Non-applicable	Non-applicable	15 mg/m³	Non-applicable

PNEC:

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
Hexamethylene diisocyanate, oligomers	STP	38,3 mg/L	Fresh water	0,127 mg/L
CAS: 28182-81-2	Soil	53182 mg/kg	Marine water	0,0127 mg/L
EC: 931-274-8	Intermittent	1,27 mg/L	Sediment (Fresh water)	266700 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	26670 mg/kg
Ethylbenzene	STP	9,6 mg/L	Fresh water	0,1 mg/L
CAS: 100-41-4	Soil	2,68 mg/kg	Marine water	0,01 mg/L
EC: 202-849-4	Intermittent	0,1 mg/L	Sediment (Fresh water)	13,7 mg/kg
	Oral	20 g/kg	Sediment (Marine water)	1,37 mg/kg
Hexamethylene diisocyanate	STP	8,42 mg/L	Fresh water	0,0774 mg/L
CAS: 822-06-0	Soil	0,0026 mg/kg	Marine water	0,00774 mg/L
EC: 212-485-8	Intermittent	0,774 mg/L	Sediment (Fresh water)	0,01334 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,001344 mg/kg

8.2 Exposure controls:

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

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the professional exposure limits. In case of using indivudual protection equipment they should have the ""CE marking"" in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

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

D.- Ocular and facial protection

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

E.- Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CE 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 resistent properties	CE CAT III	EN 13287:2008 EN ISO 20345:2011 EN 13832-1:2006 EN ISO 20344:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

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

Environmental exposure controls:

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

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

Volatile organic compounds:

With regard to Directive 2004/42/EC, this product which is ready to use has the following characteristics:

V.O.C. density at 20 ºC: 499 kg/m³ (499 g/L)

EUlimit for the product (Cat. A.J): 500 g/L (2010)

Components: Non-applicable

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
Color:	☐ Colourless
Odor:	Characteristic

Volatility:

Boiling point at atmospheric pressure:	137 ºC
Vapour pressure at 20 ºC:	766 Pa
Vapour pressure at 50 ºC:	4189 Pa (4 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	930 kg/m³
Relative density at 20 ºC:	0,93
Dynamic viscosity at 20 ºC:	3000 cP
Kinematic viscosity at 20 ºC:	3224,27 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 property:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

Flammability:

Flash Point:	25 ºC
Autoignition temperature:	275 ºC
Lower flammability limit:	Not available
Upper flammability limit:	Not available

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

- CONTINUED ON NEXT PAGE -

SECTION 10: STABILITY AND REACTIVITY (continue)

10.1 Reactivity:

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

10.2 Chemical stability:

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

10.3 Possibility of hazardous reactions:

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

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

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

10.5 Incompatible materials:

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

10.6 Hazardous decomposition products:

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

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

Dangerous health implications:

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

A.- Ingestion:

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

B- Inhalation:

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

C- Contact with the skin and the eyes:

Produces skin inflammation.

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

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.

E- Sensitizing effects:

Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

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

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.

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

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

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:

- CONTINUED ON NEXT PAGE -

SECTION 11: TOXICOLOGICAL INFORMATION (continue)

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Xylene (mixture of isomers)	LD50 oral	2100 mg/kg	Rat
CAS: 1330-20-7	LD50 dermal	1100 mg/kg	Rat
EC: 215-535-7	LC50 inhalation	11 mg/L (4 h)	Rat
Ethylbenzene	LD50 oral	3500 mg/kg	Rat
CAS: 100-41-4	LD50 dermal	15354 mg/kg	Rabbit
EC: 202-849-4	LC50 inhalation	17,2 mg/L (4 h)	Rat
Hexamethylene diisocyanate, oligomers	LD50 oral	5100 mg/kg	Rat
CAS: 28182-81-2	LD50 dermal	Non-applicable	
EC: 931-274-8	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Hexamethylene diisocyanate	LD50 oral	Non-applicable	
CAS: 822-06-0	LD50 dermal	Non-applicable	
EC: 212-485-8	LC50 inhalation	3 mg/L (4 h) (ATEi)	Rat

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity:

Identification	Acute toxicity		Specie	Genus
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	Alga
Hexamethylene diisocyanate, oligomers	LC50	Non-applicable		
CAS: 28182-81-2	EC50	Non-applicable		
EC: 931-274-8	EC50	1000 mg/L (72 h)	Scenedesmus subspicatus	Alga
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	LC50	1 - 10 mg/L (96 h)		Fish
CAS: Non-applicable	EC50	1 - 10 mg/L		Crustacean
EC: 919-446-0	EC50	1 - 10 mg/L		Alga
Ethylbenzene	LC50	42,3 mg/L (96 h)	Pimephales promelas	Fish
CAS: 100-41-4	EC50	75 mg/L (48 h)	Daphnia magna	Crustacean
EC: 202-849-4	EC50	63 mg/L (3 h)	Chlorella vulgaris	Alga

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Ethylbenzene	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 100-41-4	COD	Non-applicable	Period	14 days
EC: 202-849-4	BOD5/COD	Non-applicable	% Biodegradable	90 %
Hexamethylene diisocyanate	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 822-06-0	COD	Non-applicable	Period	28 days
EC: 212-485-8	BOD5/COD	Non-applicable	% Biodegradable	28 %

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
Ethylbenzene	BCF	1
CAS: 100-41-4	Pow Log	3,15
EC: 202-849-4	Potential	Low

12.4 Mobility in soil:

- CONTINUED ON NEXT PAGE -

SECTION 12: ECOLOGICAL INFORMATION (continue)

Identification	Absorption/desorption		Volatility	
Xylene (mixture of isomers)	Koc	202	Henry	5,249E+2 Pa·m³/mol
CAS: 1330-20-7	Conclusion	Moderate	Dry soil	Yes
EC: 215-535-7	Surface tension	Non-applicable	Moist soil	Yes
Ethylbenzene	Koc	520	Henry	7,984E+2 Pa·m³/mol
CAS: 100-41-4	Conclusion	Moderate	Dry soil	Yes
EC: 202-849-4	Surface tension	28590 N/m (25 ºC)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

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

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2000/532/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not 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, 2000/532/EC: Commission Decision of 3 May 2000

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2013 and RID 2013:

14.1	**UN number:**	UN1993
14.2	**UN proper shipping name:**	FLAMMABLE LIQUID, N.O.S. (Xylene (mixture of isomers))
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	III
14.5	**Dangerous for the environment:**	No
14.6	**Special precautions for user**	
	Special regulations:	274, 601, 640E
	Tunnel restriction code:	D/E
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 36-12:

- CONTINUED ON NEXT PAGE -

SECTION 14: TRANSPORT INFORMATION (continue)

14.1	**UN number:**	UN1993
14.2	**UN proper shipping name:**	FLAMMABLE LIQUID, N.O.S. (Xylene (mixture of isomers))
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	III
14.5	**Dangerous for the environment:**	No
14.6	**Special precautions for user**	
	Special regulations:	223, 274, 944, 955
	EmS Codes:	F-E, S-E
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2014:

14.1	**UN number:**	UN1993
14.2	**UN proper shipping name:**	FLAMMABLE LIQUID, N.O.S. (Xylene (mixture of isomers))
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group:**	III
14.5	**Dangerous for the environment:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:**	Non-applicable

SECTION 15: REGULATORY INFORMATION

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

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

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

Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012): Non-applicable

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

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

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:
— metallic glitter intended mainly for decoration,
— artificial snow and frost,
— "whoopee" cushions,
— silly string aerosols,
— imitation excrement,
— horns for parties,
— decorative flakes and foams,
— artificial cobwebs,
— stink bombs.

Specific provisions in terms of protecting people or the environment:

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

Other legislation:

Non-applicable

- CONTINUED ON NEXT PAGE -

SECTION 15: REGULATORY INFORMATION (continue)

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 453/2010)

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

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

- R Phrases
- S Phrases

CLP Regulation (EC) nº 1272/2008:

- Hazard statements

Text of R-phrases considered in section 3:

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

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

R10: Flammable
R11: Highly flammable
R20: Harmful by inhalation
R20/21: Harmful by inhalation and in contact with skin
R23: Toxic by inhalation
R36/37/38: Irritating to eyes, respiratory system and skin
R37: Irritating to respiratory system
R38: Irritating to skin
R42/43: May cause sensitisation by inhalation and skin contact
R43: May cause sensitisation by skin contact
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R65: Harmful: may cause lung damage if swallowed
R66: Repeated exposure may cause skin dryness or cracking
R67: Vapours may cause drowsiness and dizziness

CLP Regulation (EC) nº 1272/2008:

Acute Tox. 3: H331 - Toxic if inhaled
Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled
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
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
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
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure
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

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:

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continue)

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

- END OF SAFETY DATA SHEET -