


BETOFLEX M20**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier:** BETOFLEX M20
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Sealant for concrete. 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:**
PROPAMSA S.A.U.
CTRA.N 340, KM 1242,3
08620 SANT VICENÇ DELS HORTS - BARCELONA - ESPAÑA
Phone.: +34936806042 - Fax: +34936806048
propamsa@propamsa.es
www.propamsa.es
- 1.4 Emergency telephone number:** +34.93.680.60.42 (9:00 - 17:00)

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.
Resp. Sens. 1: Sensitisation, respiratory, Category 1, H334
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
Danger
- 
- Hazard statements:**
Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
- Precautionary statements:**
P102: Keep out of reach of children
P260: Do not breathe vapours
P285: In case of inadequate ventilation wear respiratory protection
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 the contents/containers in accordance with the current legislation on waste treatment
- Supplementary information:**
EUH204: Contains isocyanates. May produce an allergic reaction
- 2.3 Other hazards:**
Product fails to meet PBT/vPvB criteria


SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**
Non-applicable
- 3.2 Mixture:**
Chemical description: Polyurethane resin
Components:
In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification		Concentration
CAS: 64742-48-9 EC: 265-150-3 Index: 649-327-00-6 REACH: 01-2119486659-16-XXXX	Naphtha (petroleum), hydrotreated heavy, < 0.1 % EC 200-753-7 	ATP ATP01	1 - <2,5 %
	Regulation 1272/2008 Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Danger   		
CAS: 101-68-8 EC: 202-966-0 Index: 615-005-00-9 REACH: 01-2119457014-47-XXXX	4,4'-methylenediphenyl diisocyanate 	ATP CLP00	<1 %
	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 RE 2: H373; STOT SE 3: H335 - Danger   		
CAS: 1065336-91-5 EC: 915-687-0 Index: Non-applicable REACH: 01-2119491304-40-XXXX	Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate 	Self-classified	<1 %
	Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Sens. 1A: H317 - Warning   		

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

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 water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

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

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

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

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains 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 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.

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SECTION 5: FIREFIGHTING MEASURES (continued)

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

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

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid splashes and pulverizations. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

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

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 °C
Maximum Temp.: 35 °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.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

There are no occupational exposure limits for the substances contained in the product

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Naphtha (petroleum), hydrotreated heavy, < 0.1 % EC 200-753-7 CAS: 64742-48-9 EC: 265-150-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	300 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1500 mg/m ³	Non-applicable
4,4'-methylenediphenyl diisocyanate CAS: 101-68-8 EC: 202-966-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	50 mg/kg	Non-applicable	Non-applicable	Non-applicable
	Inhalation	0,1 mg/m ³	0,1 mg/m ³	0,05 mg/m ³	0,05 mg/m ³
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate CAS: 1065336-91-5 EC: 915-687-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	2,5 mg/kg	Non-applicable	2,5 mg/kg	Non-applicable
	Inhalation	2,35 mg/m ³	2,35 mg/m ³	2,35 mg/m ³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Naphtha (petroleum), hydrotreated heavy, < 0.1 % EC 200-753-7 CAS: 64742-48-9 EC: 265-150-3	Oral	Non-applicable	Non-applicable	300 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	300 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	900 mg/m ³	Non-applicable
4,4'-methylenediphenyl diisocyanate CAS: 101-68-8 EC: 202-966-0	Oral	20 mg/kg	Non-applicable	Non-applicable	Non-applicable
	Dermal	25 mg/kg	Non-applicable	Non-applicable	Non-applicable
	Inhalation	0,05 mg/m ³	0,05 mg/m ³	0,025 mg/m ³	0,025 mg/m ³
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate CAS: 1065336-91-5 EC: 915-687-0	Oral	1,25 mg/kg	Non-applicable	1,25 mg/kg	Non-applicable
	Dermal	1,25 mg/kg	Non-applicable	1,25 mg/kg	Non-applicable
	Inhalation	0,58 mg/m ³	0,58 mg/m ³	0,58 mg/m ³	Non-applicable

PNEC:

Identification				
4,4'-methylenediphenyl diisocyanate CAS: 101-68-8 EC: 202-966-0	STP	1 mg/L	Fresh water	1 mg/L
	Soil	1 mg/kg	Marine water	0,1 mg/L
	Intermittent	10 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate CAS: 1065336-91-5 EC: 915-687-0	STP	1 mg/L	Fresh water	0,0022 mg/L
	Soil	0,21 mg/kg	Marine water	0,00022 mg/L
	Intermittent	0,009 mg/L	Sediment (Fresh water)	1,05 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,11 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



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands



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

"As the product is a mixture of several substances, the resistance of the glove material can not be 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	Panoramic glasses against splash/projections.		EN 166:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

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

F.- Additional emergency measures

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

Environmental exposure controls:

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

Volatile organic compounds:

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

V.O.C. (Supply):	4,8 % weight
V.O.C. density at 20 °C:	67,2 kg/m ³ (67,2 g/L)
Average carbon number:	9
Average molecular weight:	130 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

*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)

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Paste
Colour:	According to the markings on the package
Odour:	Mild
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	152 °C
Vapour pressure at 20 °C:	520 Pa
Vapour pressure at 50 °C:	2921 Pa (3 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

Density at 20 °C:	1400 kg/m ³
Relative density at 20 °C:	1,4
Dynamic viscosity at 20 °C:	117 cP
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>20,5 cSt
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:	Soluble
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

Flammability:

Flash Point:	71 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	200 °C
Lower flammability limit:	0,1 % Volume
Upper flammability limit:	0,2 % Volume

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.

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SECTION 10: STABILITY AND REACTIVITY (continued)

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:

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

10.6 Hazardous decomposition products:

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

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

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):

- 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: 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.

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

E- Sensitizing effects:

- Respiratory: 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 contains substances classified as dangerous for inhalation. For more information see section 3.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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: 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.

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
Naphtha (petroleum), hydrotreated heavy, < 0.1 % EC 200-753-7	LD50 oral	15000 mg/kg
CAS: 64742-48-9	LD50 dermal	3160 mg/kg
EC: 265-150-3	LC50 inhalation	Non-applicable
4,4'-methylenediphenyl diisocyanate	LD50 oral	7616 mg/kg
CAS: 101-68-8	LD50 dermal	10000 mg/kg
EC: 202-966-0	LC50 inhalation	Non-applicable
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	LD50 oral	3230 mg/kg
CAS: 1065336-91-5	LD50 dermal	Non-applicable
EC: 915-687-0	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
Naphtha (petroleum), hydrotreated heavy, < 0.1 % EC 200-753-7	LC50	2200 mg/L (96 h)	Pimephales promelas
CAS: 64742-48-9	EC50	1000 mg/L (96 h)	Daphnia magna
EC: 265-150-3	EC50	Non-applicable	
4,4'-methylenediphenyl diisocyanate	LC50	1000 mg/L (96 h)	Brachydanio rerio
CAS: 101-68-8	EC50	Non-applicable	
EC: 202-966-0	EC50	Non-applicable	
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	LC50	0.9 mg/L (96 h)	Danio rerio
CAS: 1065336-91-5	EC50	Non-applicable	
EC: 915-687-0	EC50	1.7 mg/L (72 h)	Desmodesmus subspicatus

12.2 Persistence and degradability:

Identification	Degradability	Biodegradability
Naphtha (petroleum), hydrotreated heavy, < 0.1 % EC 200-753-7	BOD5	Non-applicable
CAS: 64742-48-9	COD	Non-applicable
EC: 265-150-3	BOD5/COD	Non-applicable
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	BOD5	Non-applicable
CAS: 1065336-91-5	COD	Non-applicable
EC: 915-687-0	BOD5/COD	Non-applicable

12.3 Bioaccumulative potential:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Bioaccumulation potential	
4,4'-methylenediphenyl diisocyanate	BCF	150
CAS: 101-68-8	Pow Log	4.51
EC: 202-966-0	Potential	High

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Naphtha (petroleum), hydrotreated heavy, < 0.1 % EC 200-753-7	Koc	100	Henry	Non-applicable
CAS: 64742-48-9	Conclusion	High	Dry soil	Non-applicable
EC: 265-150-3	Surface tension	Non-applicable	Moist soil	Non-applicable
4,4'-methylenediphenyl diisocyanate	Koc	Non-applicable	Henry	Non-applicable
CAS: 101-68-8	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 202-966-0	Surface tension	2,068E-2 N/m (283,45 °C)	Moist soil	Non-applicable
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Koc	204400	Henry	0E+0 Pa·m ³ /mol
CAS: 1065336-91-5	Conclusion	Immobile	Dry soil	No
EC: 915-687-0	Surface tension	Non-applicable	Moist soil	No

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 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) No 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) 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

- CONTINUED ON NEXT PAGE -

BETOFLEX M20**SECTION 15: REGULATORY INFORMATION (continued)**

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 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 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.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H334: May cause allergy or asthma symptoms or breathing difficulties 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: 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

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. 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

Skin Sens. 1A: 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

STOT SE 3: H336 - May cause drowsiness or dizziness

Classification procedure:

Resp. Sens. 1: Calculation method

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:

BETOFLEX M20**SECTION 16: OTHER INFORMATION (continued)**

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

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 our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -