




## BONDFLEX 390 FC

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

- 1.1 Product identifier:** BONDFLEX 390 FC
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Sealant . For professional use 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:** EVOCHEM S.A.  
Tzavardella Place  
133 41 PHILI , ATTICA - GREECE  
Phone.: 0030 210 5590460 , 0030 210 5590155 -  
Fax: 0030 210 6254737 , 0030 210 5590244  
info@evochem.gr; vmergoupis@evochem.gr;  
sales@evochem.gr  
www.evochem.gr
- 1.4 Emergency telephone number:** National Poisoning Center 2107793777

### 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) n°1907/2006 (REACH regulation).  
Xn: R42 - May cause sensitisation by inhalation
- CLP Regulation (EC) n° 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.  
Acute Tox. 4: Acute toxicity on contact with skin, Category 4  
Resp. Sens. 1: Sensitisation, respiratory, Category 1
- 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:
- Xn**  
  
Harmful
- R Phrases:**  
R42: May cause sensitisation by inhalation
- S Phrases:**  
S22: Do not breathe dust  
S23: Do not breathe vapour and spray  
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)  
S51: Use only in well-ventilated areas
- Supplementary information:**  
P91: Contains isocyanates-Read the information provided by the manufacturer  
P98: Not to be used in vessels with a total length of less than 25 metres or vessels used predominantly on inland navigation routes and lakes, nor in devices or equipment used in fish farming or the shellfishing
- Substances that contribute to the classification:**  
4,4'-methylenediphenyl diisocyanate
- CLP Regulation (EC) n° 1272/2008:**  
**Danger**  
  

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

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**BONDFLEX 390 FC**

**SECTION 2: HAZARDS IDENTIFICATION (continue)**

**Cautionary advice:**

P261: Avoid breathing dust/fume/gas/mist/vapours/spray  
P302+P352: IF ON SKIN: Wash with plenty of soap and water  
P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing  
P312: Call a POISON CENTER or doctor/physician if you feel unwell  
P322: Specific measures need to be taken (see this label)  
P363: Wash contaminated clothing before reuse

**Supplementary information:**

EUH204: Contains isocyanates. May produce an allergic reaction  
EUH208: Contains 4,4'-methylenediphenyl diisocyanate. May produce an allergic reaction

**Substances that contribute to the classification**

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

**2.3 Other hazards:**

Non-applicable

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

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

**Components:**

In accordance with Annex II of Regulation (EC) n°1907/2006 (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	<b>Xylene (mixture of isomers)</b> ATP CLP00 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	2,5 - <10 %
CAS: 101-68-8 EC: 202-966-0 Index: 615-005-00-9 REACH: 01-2119457014-47-XXXX	<b>4,4'-methylenediphenyl diisocyanate</b> ATP CLP00 Directive 67/548/EC Carc. Cat 3: R40; Xi: R36/37/38; Xn: R20, R42/43, R48/20 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	<1 %
CAS: 52829-07-9 EC: 258-207-9 Index: Non-applicable REACH: 01-2119537297-32-XXXX	<b>Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate</b> Self-classified Directive 67/548/EC N: R51/53; Xi: R36 Regulation 1272/2008 Aquatic Chronic 2: H411; Eye Irrit. 2: H319 - Warning	<1 %

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:**

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**BONDFLEX 390 FC****SECTION 4: FIRST AID MEASURES (continue)**

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:**

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 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 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 See sections 8 and 13.

**6.2 Environmental precautions:**

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.

**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 with regards manually handling weights. Maintain order, cleanliness and destroy using safe methods (section 6).

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 projections and pulverizations. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

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**BONDFLEX 390 FC**

**SECTION 7: HANDLING AND STORAGE (continue)**

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

D.- Technical recommendations to prevent environmental risks

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.

**7.2 Conditions for safe storage, including any incompatibilities:**

A.- Technical measures for storage

Minimum Temp.: 5 °C  
Maximum Temp.: 30 °C  
Maximum time: 12 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the work environment

Identification	Environmental limits		
Xylene (mixture of isomers)	IOELV (8h)	50 ppm	221 mg/m <sup>3</sup>
CAS: 1330-20-7	IOELV (STEL)	100 ppm	442 mg/m <sup>3</sup>
EC: 215-535-7	Year	2012	

Nuisance dust: Inhalable dust 10 mg/m<sup>3</sup> // Respirable dust 4 mg/m<sup>3</sup>

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
	Inhalation	289 mg/m <sup>3</sup>	289 mg/m <sup>3</sup>	77 mg/m <sup>3</sup>	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 <sup>3</sup>	0,1 mg/m <sup>3</sup>	0,05 mg/m <sup>3</sup>	0,05 mg/m <sup>3</sup>
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate CAS: 52829-07-9 EC: 258-207-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	2 mg/kg	Non-applicable	2 mg/kg	Non-applicable
	Inhalation	5,6 mg/m <sup>3</sup>	Non-applicable	5,6 mg/m <sup>3</sup>	Non-applicable

**DNEL (Population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	108 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	14,8 mg/m <sup>3</sup>	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 <sup>3</sup>	0,05 mg/m <sup>3</sup>	0,025 mg/m <sup>3</sup>	0,025 mg/m <sup>3</sup>
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate CAS: 52829-07-9 EC: 258-207-9	Oral	1 mg/kg	Non-applicable	1 mg/kg	Non-applicable
	Dermal	1 mg/kg	Non-applicable	1 mg/kg	Non-applicable
	Inhalation	1,4 mg/m <sup>3</sup>	Non-applicable	1,4 mg/m <sup>3</sup>	Non-applicable

**PNEC:**

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

Identification				
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	STP	6,58 mg/L	Fresh water	0,327 mg/L
	Soil	2,31 mg/kg	Marine water	0,327 mg/L
	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 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
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate CAS: 52829-07-9 EC: 258-207-9	STP	1 mg/L	Fresh water	0,005 mg/L
	Soil	1,6 mg/kg	Marine water	0,0005 mg/L
	Intermittent	0,011 mg/L	Sediment (Fresh water)	8,02 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,802 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 Protection Equipment, with the corresponding ""CE marking"" in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.



**B.- Respiratory protection**

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases, vapours and particles	 CAT III	EN 149:2001+A1:2009 EN 405:2001+A1:2009	Replace when an increase in resistance to breathing is observed and/or a smell or taste of the contaminant is detected.





**C.- Specific protection for the hands**

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

**D.- Ocular and facial protection**

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face mask	 CAT II	EN 166:2001 EN 167:2001 EN 168:2001 EN 172:1994/A1:2000 EN 172:1994/A2:2001 EN 165:2005	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

**E.- Bodily protection**



LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks	 CAT III	EN 13034:2005+A1:2009 EN 168:2001 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2001 EN ISO 6530:2005 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	 CAT III	EN ISO 20345:2011 EN 13832-1:2006 EN ISO 20344:2011	Replace boots at any sign of deterioration.

**F.- Additional emergency measures**

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

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

#### Volatil organic compounds:

With regard to Directive 1999/13/EC, 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
Color:	<input type="checkbox"/> White
Odor:	Aromatic

##### Volatility:

Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 20 °C:	Non-applicable *
Vapour pressure at 50 °C:	Non-applicable *
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:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility property:	Insoluble in water, soluble in organic solvents
Decomposition temperature:	Non-applicable *

##### Flammability:

Flash Point:	Non Flammable (>60 °C)
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Non-applicable *

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

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**BONDFLEX 390 FC**

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continue)**

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 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 excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Avoid direct impact	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 (CO<sub>2</sub>), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects:**

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

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than 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:

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:

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.

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

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.

E- Sensitizing effects:

Prolonged contact with the skin can result in specific respiratory hypersensitivity.

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

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

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**BONDFLEX 390 FC**

**SECTION 11: TOXICOLOGICAL INFORMATION (continue)**

**G- 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.

**H- Aspiration hazard:**

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

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	LD50 oral	2100 mg/kg	Rat
	LD50 dermal	1100 mg/kg	Rat
	LC50 inhalation	11 mg/L (4 h)	Rat
4,4'-methylenediphenyl diisocyanate CAS: 101-68-8 EC: 202-966-0	LD50 oral	7616 mg/kg	Rat
	LD50 dermal	10000 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	

**SECTION 12: ECOLOGICAL INFORMATION**

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

**12.1 Toxicity:**

Identification	Acute toxicity		Specie	Genus
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	LC50	13,5 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	0,6 mg/L (96 h)	Gammarus lacustris	Crustacean
	EC50	10 mg/L (72 h)	Skeletonema costatum	Alga
4,4'-methylenediphenyl diisocyanate CAS: 101-68-8 EC: 202-966-0	LC50	1000 mg/L (96 h)	Brachydanio rerio	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		
Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate CAS: 52829-07-9 EC: 258-207-9	LC50	4,4 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	8,58 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1,1 mg/L (72 h)	Pseudokirchneriella subcapitata	Alga

**12.2 Persistence and degradability:**

Not available

**12.3 Bioaccumulative potential:**

Identification	Bioaccumulation potential	
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	BCF	9
	Pow Log	2,77
	Potential	Low
4,4'-methylenediphenyl diisocyanate CAS: 101-68-8 EC: 202-966-0	BCF	150
	Pow Log	4,51
	Potential	High

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	Koc	202	Henry	5,249E+2 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
4,4'-methylenediphenyl diisocyanate CAS: 101-68-8 EC: 202-966-0	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	20680 N/m (283,45 °C)	Moist soil	Non-applicable

**12.5 Results of PBT and vPvB assessment:**

Non-applicable

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**BONDFLEX 390 FC**

**SECTION 12: ECOLOGICAL INFORMATION (continue)**

**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 recommend 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, 2000/532/EC: Commission Decision of 3 May 2000

**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

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):**

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:**

Non-applicable

**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° 453/2010)

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

Composition/information on ingredients:

· Added Content

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate (52829-07-9)

**Text of R-phrases considered in section 3:**

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**BONDFLEX 390 FC****SECTION 16: OTHER INFORMATION (continue)****Directive 67/548/EC and Directive 1999/45/EC:**

R10: Flammable  
R20: Harmful by inhalation  
R20/21: Harmful by inhalation and in contact with skin  
R36: Irritating to eyes  
R36/37/38: Irritating to eyes, respiratory system and skin  
R38: Irritating to skin  
R40: Limited evidence of a carcinogenic effect  
R42/43: May cause sensitisation by inhalation and 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

**CLP Regulation (EC) n° 1272/2008:**

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  
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  
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure  
STOT SE 3: H335 - May cause respiratory irritation

**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
- CL50: Lethal Concentration 50
- EC50: Effective concentration 50
- Log-POW: Octanol–water partition coefficient
- Koc: Partition coefficient of organic carbon

The information contained in this security 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 security data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -