

**MATERIAL SAFETY DATA SHEET**

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

Please consult prior to use.

**1. PRODUCT AND COMPANY IDENTIFICATION***Product Name:***GRC FLEXIMOULD PART B***Product Description:*

Component for the manufacture of urethane polymers

*Supplier:*Fibre Technologies International  
Avonmouth Way, Avonmouth

Bristol BS11 9YA

T: +44 (0)117 982 5855

F: +44 (0)117 982 0060

E: info@fibrectech.org

**Emergency Telephone Number**

24-Hour Emergency Contact number: 01179825855

**2. HAZARDS IDENTIFICATION***2.1 Classification of the substance or mixture***Classification according to Regulation (EC) No 1272/2008:**

Chronic aquatic toxicity – Category 2 – H411

For the full text of the H-statements mentioned in this section, see section 16.

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Dangerous for the environment – R51/53

For the full text of R phrases mentioned in this section, see section 16.

*2.2 Label Elements***Labelling according to Regulation (EC) No 1272/2008:**

Hazard pictograms

*Hazard statements:*

H411 – Toxic to aquatic life with long lasting effects.

*Precautionary statements:*

P273 – Avoid release to the environment

P391 – Collect spillage

P501 – Dispose of contents/container to an approved waste disposal plant

*Supplemental information*

Fibre Technologies International Ltd

Avonmouth Way, Avonmouth, Bristol BS11 9YA

T: +44 (0)117 9825855 F: +44 (0)117 9820060 E: info@fibrectech.org

Page 1 of 16



## MATERIAL SAFETY DATA SHEET

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

Contains: Dibutyltin dilaurate. May produce an allergic reaction.

### 3. COMPOSITION / INFORMATION ON THE INGREDIENTS

#### 3.1 Mixtures

This product is a mixture

CASRN / EC-No. / Index-No.	REACH Registration Number	Concentration	Component	Classification: REGULATION (EC) No 1272/2008
<b>CASRN</b> Confidential <b>EC-No.</b> Polymer <b>Index-No.</b> -	-	40.0 - <60.0 %	Polyether polyol	Not classified
<b>CASRN</b> 70775-94-9 <b>EC-No.</b> 615-163-9 <b>Index-No.</b> -	-	25.0 - <40.0 %	Sulfonic Acids, C10-18-Alkane, ph Esters	Not classified
<b>CASRN</b> 9003-54-7 <b>EC-No.</b> Polymer <b>Index-No.</b> -	-	10.0 - <20.0 %	2- Propenenitrile,p olymer with ethenylbenzene	Not classified
<b>CASRN</b> 68479-98-1 <b>EC-No.</b> 612-130-00-0 <b>Index-No.</b> 612-130-00-0	01-2119486805-25	2.5 - <5.0 %	Diethylmethylbe nzenediamine	Acute Tox.-4-H302 Acute Tox.-4-H312 Eye Irrit.-2-H319 STOT RE-2-H373 Aquatic Acute-1-H400 Aquatic Chronic-1-H410
<b>CASRN</b> 77-58-7 <b>EC-No.</b> 201-039-8 <b>Index-No.</b> -	01-2119496068-27	0.1 - <0.25 %	Dibutyltin dilaurate	Skin Corr.-1C-H314 Eye Dam.-1-H318 Skin Sens.-1B-H317 Muta.-2-H341 Repr.-1B-H360 STOT SE-1-H370 STOT RE-1-H372 Aquatic Acute-1-H400 Aquatic Chronic-1-H410

If present in this product, any not classified components disclosed above for which no country specific OEL value(s) is(are) indicated under Section 8, are being disclosed as voluntarily disclosed components.

For the full text of the H-Statements mentioned in this section, see section 16.

## MATERIAL SAFETY DATA SHEET

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

CASRN / EC-No. / Index-No.	Concentration	Component	Classification: 67/548/EEC
<b>CASRN</b> Confidential <b>EC-No.</b> Polymer <b>Index-No.</b> -	40.0 - <60.0 %	Polyether polyol	Not classified
<b>CASRN</b> 70775-94-9 <b>EC-No.</b> 615-163-9 <b>Index-No.</b> -	25.0 - <40.0 %	Sulfonic Acids, C10-18-Alkane, ph Esters	Not classified
<b>CASRN</b> 9003-54-7 <b>EC-No.</b> Polymer <b>Index-No.</b> -	10.0 - <20.0 %	2-Propenenitrile, polymer with ethenylbenzene	Not classified
<b>CASRN</b> 68479-98-1 <b>EC-No.</b> 612-130-00-0 <b>Index-No.</b> 612-130-00-0	2.5 - <5.0 %	Diethylmethylbenzenediamine	Xn-R21/22-R48/22 Xi-R36 N-R50-R53
<b>CASRN</b> 77-58-7 <b>EC-No.</b> 201-039-8 <b>Index-No.</b> -	0.1 - <0.25 %	Dibutyltin dilaurate	C-R34 R43 T-Repr.Cat.2-R60 T-Repr.Cat.2-R61 Mut.Cat.3-R68 T-R48/25 N-R50/53

If present in this product, any not classified components disclosed above for which no country specific OEL value(s) is(are) indicated under Section 8, are being disclosed as voluntarily disclosed components.

For the full text of the H-Statements mentioned in this section, see section 16.

#### 4. FIRST-AID MEASURES

##### 4.1 Description of first aid measures

###### General Advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection) . If potential for exposure exists refer to section 8 for specific personal protective equipment.

**MATERIAL SAFETY DATA SHEET**

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B***Eye Contact:*

Immediately flush eyes thoroughly with water for several minutes. Remove contact lenses after the first initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, obtain medical attention without delay, preferably an ophthalmologist.

*Skin contact:*

Remove material from skin by immediately washing with soap and plenty of water. Remove contaminated clothing and shoes whilst washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

*Inhalation:*

Move the exposed person to fresh air. If effects occur consult a physician.

*Ingestion:*

If swallowed seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

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

Aside from the information found under Description of First Aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

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

Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

---

**5. FIRE-FIGHTING MEASURES***5.1 Extinguishing Media***Suitable extinguishing media:**

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

**Unsuitable Extinguishing media:** Do not use direct water stream. May spread fire.

*5.2 Special hazards arising from the substance or mixture*

**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen Oxides, Carbon monoxide, Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may

## MATERIAL SAFETY DATA SHEET

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

occur upon application of direct water stream to hot liquids.

*5.3 Advice for firefighters*

**Firefighting procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitors nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "accidental release measures" and "ecological information" sections of this (M)SDS.

**Special Protective Equipment for Firefighters:** Wear positive pressure self contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boot and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If protective equipment is not available or not used, fight fire from a protected location or safe distance. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

---

**6. ACCIDENTAL RELEASE MEASURES***6.1 Personal precautions, protective equipment and emergency procedures:*

Isolate area. Refer to section 7, Handling, for additional precautionary measures. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to section 8, Exposure Controls and Personal Protection.

*6.2 Environmental Precautions:*

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Spills and discharge into natural waterways is likely to kill aquatic organisms. See section 12, Ecological Information.

*6.3 Methods and materials for containment and cleaning up:*

Contain spilled material if possible. Absorb with materials such as: Dirt. Sand. Sawdust. Collect in suitable and properly labelled open containers. Wash the spill site with water. See section 13, Disposal Considerations, for additional information.

*6.4 Reference to other sections*

Reference to other sections, if applicable, have been provided in the previous sub-sections.

---

**MATERIAL SAFETY DATA SHEET**

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

7. HANDLING AND STORAGE

*7.1 Precautions for safe Handling:*

Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Keep container closed. This material is hygroscopic in nature. See section 8, Exposure Controls and Personal Protection. Spills of these organic materials on hot fibrous insulations may lead to lowering of the auto ignition temperatures possibly resulting in spontaneous combustion.

*7.2 Conditions for safe storage, including any incompatibilities:* Protect from atmospheric moisture. Store in a dry place. Avoid prolonged exposure to heat and air. Store in following materials: Carbon steel, Stainless steel, Polypropylene, Polyethylene lined container, Teflon, Glass-lined container, Aluminium, Plasite 3066 lined container, Plasite 3070 lined container, 316 stainless steel. See section 10 for more specific information.

*Storage Period:* Use within 12 months

*Storage Temperature:* 15-30 °C

*7.3 Specific end uses:* See the technical data sheet on this product for further information.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

*8.1 Control parameters*

Exposure Limits are listed below, if they exist

Component	Regulation	Type of listing	Value/Notation
Diethylmethylbenzenediamine	Dow IHG Dow IHG	TWA TWA	0.02 ppm Absorbed by skin
Dibutyltin dilaurate	ACGIH ACGIH ACGIH ACGIH GB EH40 GB EH 40 GB EH40 GB EH40	TWA TWA STEL STEL TWA STEL TWA STEL	0.1 mg/m <sup>3</sup> , Tin Absorbed via skin 0.2 mg/m <sup>3</sup> , Tin Absorbed via skin Absorbed via skin Absorbed via skin 0.1 mg/m <sup>3</sup> , Tin 0.2 m/m <sup>3</sup> , Tin

*8.2 Exposure controls*

**Engineering Control Measures:**

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilations may be necessary for some operations.

## MATERIAL SAFETY DATA SHEET

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

### Individual protection measures

*Eye/ Face Protection:* Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN166 or equivalent.

*Hand Protection:* Use chemical resistant gloves classified under Standard EN374: Protective Gloves against chemicals and micro organisms. Examples of preferred glove barrier materials include: Viton. Polyvinyl alcohol ("PVA"). Chlorinated polythene. Polythene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time is greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time is greater than 60 minutes according to EN 374) is recommended. NOTICE: the selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

*Other protection:* Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend upon the task.

*Respiratory Protection:* Respiratory protection should be worn when there is a potential to exceed the exposure limits requirements or guidelines. If there are no applicable exposure limits requirements or guidelines, wear respiratory protection when adverse effects such as respiratory irritation or discomfort have been experienced or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed however if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapour cartridge with a particulate pre-filter, type AP2.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<i>Physical State:</i>	Liquid
<i>Colour:</i>	Red
<i>Odour Threshold:</i>	Characteristic
<i>Flash point – Closed cup:</i>	>100°C <i>Estimated</i>
<i>Flammable limits in air:</i>	Lower: No test data available Upper: No test data available
<i>Auto ignition Temperature:</i>	No test data available
<i>Vapour Pressure:</i>	No test data available
<i>Boiling point (760 mmHg):</i>	>100°C <i>estimated</i>
<i>Vapour Density (air=1):</i>	No test data available
<i>Relative Density (water=1)</i>	1.01 – 1.04 at 25°C / ASTM D891
<i>Freezing Point:</i>	No test data available
<i>Melting Point:</i>	No test data available

**MATERIAL SAFETY DATA SHEET**

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

<i>Solubility in water (by weight):</i>	Partially soluble
<i>pH:</i>	No test data available
<i>Kinematic Viscosity:</i>	470 – 900mm <sup>2</sup> /s @ 25°C ASTM D4878
<i>Explosive properties:</i>	Not explosive
<i>Oxidising properties:</i>	No

**10. STABILITY AND REACTIVITY**

*10.1 Reactivity:* No data available

*10.2 Chemical stability:* Stable under recommended storage conditions. See storage, section 7.

*10.3 Possibility of hazardous reactions:* Will not occur by itself.

*10.4 Conditions to avoid:* Product can oxidize at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems

*10.5 Incompatible Materials:* Avoid contact with oxidizing materials, strong acids, strong bases and metals such as Brass Zinc Copper. Avoid unintended contact with isocyanates. The reaction of polyols and isocyanates generates heat.

*10.6 Hazardous decomposition products:* Decomposition products depend on temperature, air supply and the presence of other materials. Decomposition products can include but are not limited to Carbon Dioxide, Alcohols, Ethers, Hydrocarbons, Keetones, Polymer fragments.

**11. TOXICOLOGICAL INFORMATION**

*Toxicological information on this product or its components appear in this section when such data is available.*

***11.1 Information on toxicological effects***

***Acute Toxicity***

***Accute oral toxicity*** Low toxicity if swallowed. Small amount swallowed incidentally as a result of normal handling operations are not likely to cause injury, however, swallowing larger amounts may cause injury.

As product: Single dose oral LD50 has not been determined. LD50, rat, >2,000 mg/kg *estimated*.

***Acute dermal toxicity*** Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined. LD50, rabbit, >2,000 mg/kg *estimated*.

***Acute inhalation toxicity*** At room temperature, exposure to vapour is minimal due to low volatility; single exposure is not likely to be hazardous. Vapor from heated material may cause respiratory irritation.

As product: The LC50 has not been determined.



**MATERIAL SAFETY DATA SHEET**

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

*Skin corrosion/irritation:* Prolonged exposure not likely to cause significant skin irritation.

*Serious eye damage/eye irritation:* May cause slight eye irritation.

*Sensitization:* Contains component(s) which have caused allergic skin sensitization in guinea pigs.

*For respiratory sensitization:* No relevant data found.

*Specific Target Organ Systemic Toxicity (Single Exposure):* Evaluation of available data suggests that this material is not an STOT-SE toxicant.

*Specific Target Organ Systemic Toxicity (Repeated Exposure):* Contains components which have been reported to cause effects on the following organs in animals – Liver, Pancreas, Eye, Thyroid.

*Carcinogenicity:* Diethyltoluenediamine (DETDA) has caused cancer in long-term animal studies. Increased numbers of tumours in the liver, thyroid and possibly the mammary glands were observed in rats given DETDA in their diet at exaggerated doses for 2 years.

*Teratogenicity:* Contains component(s) which caused birth defects in laboratory animals.

*Reproductive toxicity:* Contains component(s) which have interfered with fertility in animal studies. In animal studies on component(s), effects on reproduction were seen only at doses that produced significant toxicity to the parent animals.

*Mutagenicity:* Contains component(s) which were negative in some in vitro genetic toxicity studies and positive in others. Genetic toxicity studies in animals were negative for the component(s) tested.

*Aspiration hazard:* Based on available information, aspiration hazard could not be determined.

**COMPONENTS INFLUENCING TOXICITY****Polyether polyol*****Acute inhalation toxicity***

The LC50 has not been determined.

**Sulfonic Acids, C10-C18-Alkane, ph Esters*****Acute inhalation toxicity***

The LC50 has not been determined.

**2-Propenenitrile, polymer with ethenylbenzene*****Acute inhalation toxicity***

The LC50 has not been determined.

**Diethylmethylbenzenediamine*****Acute inhalation toxicity***

## MATERIAL SAFETY DATA SHEET

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

The LC50 value is greater than the Maximum Attainable Concentration.

**Dibutyltin dilaurate*****Acute inhalation toxicity***

The LC50 value has not been determined.

---

**12. ECOLOGICAL INFORMATION**

*Ecotoxicological information on this product or its components appear in this section when such data is available.*

**12.1 Toxicity****Polyether polyol*****Acute toxicity to fish***

For similar material(s):

Material is not classified as dangerous to aquatic organisms.

**Sulfonic Acids, C10-C18-Alkane, ph Esters*****Acute toxicity to fish***

Material is not classified as dangerous to aquatic organisms.

Toxicity to aquatic species occurs at concentrations above materials water solubility.

**2-Propenenitrile, polymer with ethenylbenzene*****Acute toxicity to fish***

Material is not classified as dangerous to aquatic organisms.

**Diethylmethylbenzenediamine*****Acute toxicity to fish***

Material is very toxic to aquatic organisms (LC50/EC50/IC50 below 1mg/L in the most sensitive species). LC50, *Leuciscus idus* (Golden orfe), static test, 48 hour, 194 mg/l, OECD Test Guideline 203 or Equivalent.

***Acute toxicity to aquatic invertebrates***

EC50, *Daphnia magna* (water flea), static test, 48 Hour, 0.5 mg/l, OECD Test Guideline 202 or Equivalent.

***Acute toxicity to algae/aquatic plants***

ErC50, *Desmodesmus subspicatus* (green algae), static test, 72 Hour, Growth rate, 100 mg/l, OECD Test Guideline 201

***Toxicity to bacteria***

EC10, Bacteria, 16 Hour, 170 mg/l

## MATERIAL SAFETY DATA SHEET

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B****Dibutyltin dilaurate*****Acute toxicity to fish***

Material is very toxic to aquatic organisms (LC50/EC50/IC50 below 1 mg/L in the most sensitive species).

LC50, Danio rerio (zebra fish), static test, 96 Hour, &gt;3.1 mg/l, OECD Test Guideline 203 or Equivalent

***Acute toxicity to aquatic invertebrates***

EC50, Daphnia magna (water flea), static test, 48 Hour, &lt;0.463 mg/l, OECD Test Guideline 202.

***Acute toxicity to algae/aquatic plants***

EC50, Algae (Desmodesmus subspicatus), 72 hour, Growth rate inhibition, &gt;1 mg/l. OECD test guideline 201.

***Toxicity to bacteria***

EC50, activated sludge, 3 hour, respiration rates, 1,000 mg/l, activated sludge test (OECD 209).

*12.2 Persistence and Degradability:***Polyether polyol*****Biodegradability:*** Most polyols are expected to degrade only slowly in the environment.**Sulfonic Acids, C10-C18-Alkane, ph Esters*****Biodegradability:*** For the major component(s): Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however these results do not necessarily mean that the material is not biodegradable under environmental conditions. Material is inherently biodegradable (reaches > 20% biodegradation in OECD test(s) for inherent biodegradability).

10 day window: Fail.

Biodegradation: 61%

Exposure time: 47 d

Method: OECD Test Guideline 301F or equivalent.

**2-Propenenitrile, polymer with ethenylbenzene*****Biodegradability:*** No appreciable biodegradation is expected.**Diethylmethylbenzenediamine*****Biodegradability:*** Material is not readily biodegradable according to OECD/EEC guidelines.

10-day Window: Fail

Biodegradation: &lt;1%

Exposure time: 28 d

Method: OECD Test Guideline 301D or equivalent.

**Dibutyltin dilaurate*****Biodegradability:*** Based upon stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not readily biodegradable under environmental conditions.

Fibre Technologies International Ltd

Avonmouth Way, Avonmouth, Bristol BS11 9YA

T: +44 (0)117 9825855 F: +44 (0)117 9820060 E: info@fibrectech.org

Page 11 of 16



MATERIAL SAFETY DATA SHEET

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

10 day Window: Fail  
Biodegradation: 23%  
Exposure time: 39d  
Method: OECD Test Guideline 301F or equivalent

*12.3 Bio accumulative potential*

**Polyether polyol**

**Bioaccumulation:** No bio concentration is expected because of the relatively high molecular weight (MW greater than 1000).

**Sulfonic Acids, C10-C18-Alkane, ph Esters**

**Bioaccumulation:** Bio concentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

**Partition coefficient: n-octanol/water(log Pow):** 5.7 – 11.3 Measured

**Bioconcentration factor (BCF):** 7 - 212

**2-Propenenitrile, polymer with ethenylbenzene**

**Bioaccumulation:** No bio concentration is expected because of the relatively high molecular weight (MW greater than 1000).

**Diethylmethylbenzenediamine**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water(log Pow):** 1.17 Measured

**Bioconcentration factor (BCF):** 3 Estimated.

**Dibutyltin dilaurate**

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Low Pow between 3 and 5).

**Partition coefficient: n-octanol/water(log Pow):** 4.44 at 20.8°C OECD Test Guideline 107

**Bioconcentration factor (BCF):** 2.91 Cyprinus carpio (Carp) 7 d Measured

*12.4 Mobility in soil*

**Polyether polyol**

No relevant data found

**Sulfonic Acids, C10-C18-Alkane, ph Esters**

Expected to be relatively immobile in soil (Koc . 5000).

**Partition coefficient(Koc):** >5000

**2-Propenenitrile, polymer with ethenylbenzene**

No relevant data found

**Diethylmethylbenzenediamine**

Potential for mobility in soil is low (Koc between 500 and 2000). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

**Partition coefficient(Koc):** > 551.2 Estimated

## MATERIAL SAFETY DATA SHEET

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B****Dibutyltin dilaurate**

No relevant data found

*12.5 Results of PBT and vPvB assessment***Polyether polyol**

This mixture contains no substance considered to be persistent, bio accumulating and toxic (PBT).

**Sulfonic Acids, C10-C18-Alkane, ph Esters**

This substance is not considered to be very persistent, bio accumulating and toxic (PBT). This substance is not considered to be very persistent and very bio accumulating (vPvB).

**2-Propenenitrile, polymer with ethenylbenzene**

This substance is not considered to be very persistent, bio accumulating and toxic (PBT). This substance is not considered to be very persistent and very bio accumulating (vPvB).

**Diethylmethylbenzenediamine**

This substance has not been assessed for persistence, bio accumulation and toxicity (PBT).

**Dibutyltin dilaurate**

This substance is not considered to be very persistent, bio accumulating and toxic (PBT). This substance is not considered to be very persistent and very bio accumulating (vPvB).

*12.6 Other adverse effects***Polyether polyol**

This substance is not in Annex 1 of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

**Sulfonic Acids, C10-C18-Alkane, ph Esters**

This substance is not in Annex 1 of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

**2-Propenenitrile, polymer with ethenylbenzene**

This substance is not in Annex 1 of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

**Diethylmethylbenzenediamine**

This substance is not in Annex 1 of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

**Dibutyltin dilaurate**

This substance is not in Annex 1 of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

**MATERIAL SAFETY DATA SHEET**

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

---

**13. DISPOSAL CONSIDERATIONS**

This product when being disposed of in its unused and uncontaminated state should be treated as hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residual materials additional evaluations may be required. Do not dump into any sewers, on the ground or not any body of water.

The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact the authorized waste disposal services.

---

**14. TRANSPORT INFORMATION****CLASSIFICATION FOR ROAD AND RAIL TRANSPORT (ADR/RID):**

- 14.1 UN Number: UN 3082  
14.2 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Diethylmethylbenzenediamine)  
14.3 Class: 9  
14.4 Packing Group: III  
14.5 Environmental hazards: Diethylmethylbenzenediamine  
14.6 Special precautions for user: Hazard identification No: 90

**CLASSIFICATION FOR SEA TRANSPORT (IMO-IMDG)**

- 14.1 UN Number: UN 3082  
14.2 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Diethylmethylbenzenediamine)  
14.3 Class: 9  
14.4 Packing Group: III  
14.5 Environmental hazards: Diethylmethylbenzenediamine  
14.6 Special precautions for user: EmS: F-A, S-F  
14.7 Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code – Consult IMO regulations before transporting ocean bulk.

**CLASSIFICATION FOR AIR TRANSPORT (IATA/CAO):**

- 14.1 UN Number: UN 3082  
14.2 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Diethylmethylbenzenediamine)  
14.3 Class: 9  
14.4 Packing Group: III  
14.5 Environmental hazards: Not applicable  
14.6 Special precautions for user: No data available

**MATERIAL SAFETY DATA SHEET**

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

*This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorised sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transport of the material.*

---

**15. REGULATORY INFORMATION**

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

**REACH Regulation (EC) No 1907/2006**

This product contains only components that have been either pre-registered, registered, are exempt from registration, are regarded as registered or are not subject to registration according to Regulation (EC) No. 1907/2006 (REACH). The aforementioned indications of the REACH registration status are provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. It is the buyers/users responsibility to ensure that their understanding of the regulatory status of this product is correct.

**Restrictions on the manufacture, placing on the market and use:**

The following substance/s contained in this product is/are subject through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product have to comply with the restrictions placed upon it by the aforementioned provision.

CAS-No: 77-58-7 Name: Dibutyltin dilaurate  
Restriction status: listed in REACH Annex XVII

Restricted uses: See Commission Regulation (EU) No 276/2010 for Conditions of Restriction.

*15.2 Chemical safety assessment*

Not applicable

---

**16. OTHER INFORMATION:****Full text of H-Statements referred to under sections 2 and 3**

- H302 – Harmful if swallowed
- H312 – Harmful in contact with skin
- H314 – Causes severe skin burns and eye damage
- H317 – May cause an allergic skin reaction
- H318 – Causes serious eye damage
- H319 – Causes serious eye irritation
- H341 – Suspected of causing genetic defects
- H360 – May damage fertility or the unborn child
- H370 – Causes damage to organs if swallowed
- H372 – Causes damage to organs through prolonged or repeated exposure if swallowed

**MATERIAL SAFETY DATA SHEET**

Date of Issue 17/03/2015

Safety Data Sheet according to Reg. (EU) No 453/2010

**Product name: GRC Fleximould Part B**

H373 – May cause damage to organs through prolonged or repeated exposure if swallowed

H400 – Very toxic to aquatic life

H410 – Very toxic to aquatic life with long lasting effects

H411 – Toxic to aquatic life with long lasting effects

**Full text of R-phrases referred to under sections 2 and 3**

R21/22 - Harmful in contact with skin and if swallowed

R34 – Causes burns

R36 - Irritating to eyes

R43 – May cause sensitisation by skin contact

R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed

R48/25 - Toxic, danger of serious damage to health by prolonged exposure if swallowed

R50 – Very toxic to aquatic organisms

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R53 – May cause long term adverse effects in the aquatic environment

R60 - May impair fertility.

R61 - May cause harm to the unborn child.

R68 - Possible risks of irreversible effects.

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008**

Aquatic Chronic – 2 – H411 Calculation method

**Product literature**

Additional information on this product may be obtained by calling your sales or customer service contact.

*Fibre Technologies International Ltd urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyers / users responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer / users duty to determine the conditions necessary for the safe use of the product.*