**Safety data sheet**

05/27/2015

**SECTION 1: Identification of the substance/mixture and of the company/**

**undertaking**

· **1.1 Product identifier**

· **Trade name: Epoxy Resin**

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

No further relevant information available.

· **Application of the substance / the mixture**

Intermediate product mixture for industrial and commercial applications

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Shark Industries

6700 Bleck Drive

Rockford, MN 55373

· **Informing department:**

Phone: 800-537-4275

Fax: 763-565-1901 www.sharkind.com

· **1.4 Emergency telephone number:**

1-800-424-9300

**SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

 GHS09 environment

|  |  |  |
| --- | --- | --- |
| Aquatic Chronic 2 | H411 | Toxic to aquatic life with long lasting effects. |
| GHS07 |  |  |
| Skin Irrit. 2  Eye Irrit. 2A Skin Sens. 1 | H315  H319  H317 | Causes skin irritation.  Causes serious eye irritation.  May cause an allergic skin reaction. |



· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**

GHS07 GHS09



· **Signal word** Warning

· **Hazard-determining components of labelling:**

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =

700)

· **Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

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H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves.

P280 Wear eye protection / face protection. P273 Avoid release to the environment. P264 Wash thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. P321 Specific treatment (see on this label).

P363 Wash contaminated clothing before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P302+P352 IF ON SKIN: Wash with plenty of water.

P391 Collect spillage.

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Modified, filled epoxy resin

|  |  |  |
| --- | --- | --- |
| · **Dangerous components:** | | |
| CAS: 25068-38-6  NLP: 500-033-5 | reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number  average molecular weight = 700) | 10-25% |
| Aquatic Chronic 2, H411;  Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 |

**SECTION 4: First aid measures**

· **4.1 Description of first aid measures**

· **After inhalation**

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

· **After skin contact** Instantly wash with water and soap and rinse thoroughly.

· **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

· **After swallowing** In case of persistent symptoms consult doctor.

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

No further relevant information available.

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

No further relevant information available.

**SECTION 5: Firefighting measures**

· **5.1 Extinguishing media**

· **Suitable extinguishing agents**

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

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· **5.2 Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· **5.3 Advice for firefighters**

· **Protective equipment:** Put on breathing apparatus.

**SECTION 6: Accidental release measures**

· **6.1 Personal precautions, protective equipment and emergency procedures** Not required.

· **6.2 Environmental precautions:**

Inform respective authorities in case product reaches water or sewage system. Do not allow to enter drainage system, surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment. See Section 13 for information on disposal.

**SECTION 7: Handling and storage**

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

· **Information about protection against explosions and fires:** No special measures required.

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

· **Storage**

· **Requirements to be met by storerooms and containers:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Keep container tightly sealed.

· **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

· **Additional information about design of technical systems:** No further data; see item 7.

· **8.1 Control parameters**

· **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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| · **DNELs** | | | |
| **25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)** | | | |
| Dermal  Inhalative | Long-term  Short-term Long-term Short-term | 8.3 mg/kg KG/Tag (-)  8.3 mg/kg KG/Tag (-)  12.3 mg/m³ (-)  12.3 mg/m³ (-) | |
| · **PNECs** | | | |
| **25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)** | | | |
| Freshwater aquatic  Freshwater aquatic sediment  Marine water | | | 0.006 mg/l (-)  0.996 mg/kg (-)  0.0006 mg/l (-) |

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Marine water sediment 0.0996 mg/kg (-) STP 10 mg/l (-)

Soil 0.196 mg/kg TG (-)

· **Additional information:**

The lists that were valid during the compilation were used as basis. Risk management measures

Recommendation: calculation / risk assessment, for example, ECETOCTRAM [(www.ecetoc.eu)](http://www.ecetoc.eu)

· **8.2 Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food. Take off immediately all contaminated clothing

Wash hands during breaks and at the end of the work. Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Not necessary if room is well-ventilated.

· **Protection of hands:** Protective gloves.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR Nitrile rubber, NBR

· **Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Tightly sealed safety glasses.

**SECTION 9: Physical and chemical properties**

|  |
| --- |
| · **9.1 Information on basic physical and chemical properties**  · **General Information**  · **Appearance:**  **Form:** Pasty  **Colour:** Beige  · **Odour:** Light  · **Odour threshold:** Not determined. |
| · **pH-value:** Not determined. |
| · **Change in condition**  **Melting point/Melting range:** Not determined  **Boiling point/Boiling range:** 261 °C |
| · **Flash point:** 151 °C |
| · **Inflammability (solid, gaseous)** Not applicable. |
| · **Ignition temperature:** > 415 °C |
| · **Decomposition temperature:** Not determined. |
| · **Self-inflammability:** Product is not selfigniting. |
| · **Danger of explosion:** Product is not explosive. |

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| · **Critical values for explosion:**  **Lower:** Not determined.  **Upper:** Not determined. |
| · **Vapour pressure:** Not determined. |
| · **Density at 20 °C** 1.4 g/cm³  · **Relative density** Not determined.  · **Vapour density** Not determined.  · **Evaporation rate** Not determined. |
| · **Solubility in / Miscibility with**  **Water:** Not miscible or difficult to mix |
| · **Partition coefficient (n-octanol/water):** Not determined. |
| · **Viscosity:**  **dynamic at 20 °C:** 650000 mPas **kinematic:** Not determined. **Organic solvents:** 0.0 %  · **9.2 Other information** No further relevant information available. |

**SECTION 10: Stability and reactivity**

· **10.1 Reactivity**

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

· **10.3 Possibility of hazardous reactions** No dangerous reactions known

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

· **10.6 Hazardous decomposition products:** No dangerous decomposition products known

**SECTION 11: Toxicological information**

· **11.1 Information on toxicological effects**

· **Acute toxicity:**

|  |  |  |
| --- | --- | --- |
| · **LD/LC50 values that are relevant for classification:** | | |
| **25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)** | | |
| Oral  Dermal | LD50  LD50 | 11400 mg/kg (rat)  > 2000 mg/kg (rbt) |

· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritant effect.

· **Sensitisation:** Sensitization possible by skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Irritant

**SECTION 12: Ecological information**

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

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· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxical effects:**

· **Remark:** Toxic for fish

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water. Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil. Also poisonous for fish and plankton in water bodies.

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

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

Disposal must be made according to official regulations.

07 00 00 WASTES FROM ORGANIC CHEMICAL PROCESSES

07 02 00 Wastes from the mfsu of plastics, synthetic rubber and man-made fibres

07 02 08 Other still bottoms and reaction residues

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

· **14.1 UN-Number**

· **ADR, IMDG, IATA** UN3082

· **14.2 UN proper shipping name**

· **ADR** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

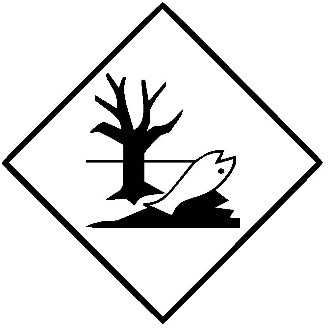
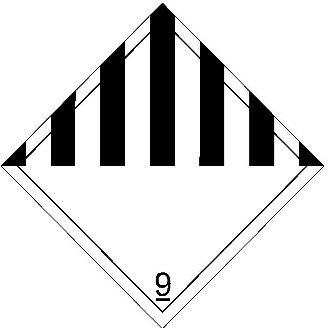
· **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)), MARINE POLLUTANT

· **IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

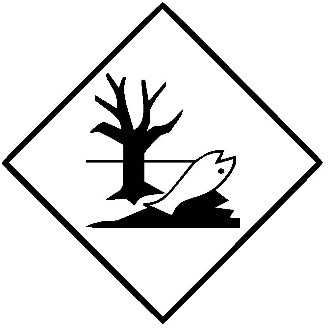
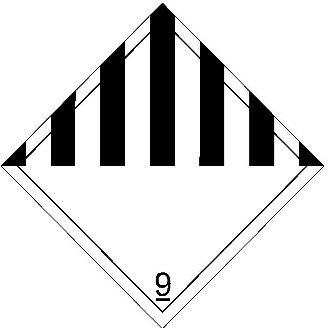
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| --- |
| · **14.3 Transport hazard class(es)**  · **ADR**  · **Class** 9 (M6) Miscellaneous dangerous substances and articles.  · **Label** 9 |
| · **IMDG, IATA**  · **Class** 9 Miscellaneous dangerous substances and articles.  · **Label** 9 |
| · **14.4 Packing group**  · **ADR, IMDG, IATA** III |
| · **14.5 Environmental hazards:** Product contains environmentally hazardous substances: reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight = 700)  · **Marine pollutant:** Yes  Symbol (fish and tree)  · **Special marking (ADR):** Symbol (fish and tree)  · **Special marking (IATA):** Symbol (fish and tree) |
| · **14.6 Special precautions for user** Warning: Miscellaneous dangerous substances and articles.  · **Kemler Number:** 90  · **EMS Number:** F-A,S-F |
| · **14.7 Transport in bulk according to Annex II**  **of MARPOL73/78 and the IBC Code** Not applicable. |
| · **Transport/Additional information:** |
| · **ADR**  · **Limited quantities (LQ)** 5L  · **Excepted quantities (EQ)** Code: E1  Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml  · **Transport category** 3  · **Tunnel restriction code** E |
| · **IMDG**  · **Limited quantities (LQ)** 5L  · **Excepted quantities (EQ)** Code: E1  Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |



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· **UN "Model Regulation":** UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)), 9, III

**SECTION 15: Regulatory information**

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

· **National regulations**

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information** These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

· **Department issuing data specification sheet:** Labor 3

· **Contact:** R.Schumacher

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations

Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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