

MATERIAL SAFETY DATA SHEET

SPORT-FIX Hardener Additive

Issued March 2004

1) Identification of the Substance/Preparation and Company/Undertaking

Supplier: EnviroStik Ltd Tel: (01889) 271751
Airfield Industrial Estate Fax: (01889) 271161
Hixon
Stafford
ST18 OPF
U.K.

Product Name: Sport-Fix Hardener Additive

2) Composition/Information on Ingredients

Diphenyl methane - 4,4-diisocyanate 100%
R20 Harmful by inhalation.
R36/27/2848: Irritating to eyes, respiratory system and skin.
R42 May cause sensitisation.

3) Hazards Identification

The product is a harmful, irritant liquid, which may cause sensitisation by inhalation.

4) First Aid Measures

Inhalation: Provide patient with fresh air and seek medical advice.
Eye Contact: Irrigate thoroughly with water and seek medical advice.
Skin Contact: Wipe off excess with a paper towel, then clean with resin removing cream or hand cleanser. DO NOT use solvents. Finally, wash with soap and water.
Ingestion: DO NOT induce vomiting. Seek medical advice.

5) Fire Fighting Measures

In a fire, toxic gases are possible and firemen must wear self-contained breathing apparatus. Use dry powder or carbon dioxide type extinguisher.

6) Accidental Release Measures

Do not allow to enter drains or watercourses. Absorb on wet absorbent material such as damp sawdust. Allow to react (carbon dioxide is given off). The residue may be disposed of by landfill or incineration.

7) Handling and Storage

Use in well ventilated areas. Store in a dry cool area away from direct sunlight. Avoid temperatures below 0°C and above 50°C.

8) Exposure Controls/Personal Protection

Use eye protection if splashing is a possibility. If dust is formed a suitable mask should be worn.

Maximum Exposure Limit: 0.02 mg/m³ (8 hour)
Isocyanates (as NCO): 0.07 mg/m³ (10 minutes)
(Ref EH40/93)

9) Physical and Chemical Properties*

Appearance: Dark brown liquid
Odour: Musty
Relative Density: Approx. 1.2g/ml
Miscibility: Not miscible with water but reacts
Solids Content: 100%

10) Stability and Reactivity

In a fire, smoke and fumes with carbon dioxide, carbon monoxide, will be generated.
Reacts with water to give off carbon dioxide. Reacts exothermically with amines and alcohols.

11) Toxicological Information

Over exposure entails the risk of irritating effects on eyes, nose, throat and respiratory tract. Delayed appearance of complaints and the development of hypersensitivity (difficult breathing, coughing, and asthma) are possible. In the case of longer contact with the skin, tanning and irritant effects are possible.

12) Ecological Information

Do not allow to escape into waterways, waste water or soil.

The product reacts with water at the interface forming CO₂ and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g. detergents) or by water soluble solvents.

Data on diphenylmethane diisocyanate, isomers and homologues:-

Biodegradability: 0% after 28 days (respirometer test)

Acute Fish Toxicity: LCO = >1000 mg/l

Test species: Brachydanio rerio

Duration of test 96 hrs

Toxicity for Daphnia: EC50 = >1000 mg/l

Duration of test 24 hrs

Acute Bacteria Toxicity: EC50 = >100 mg/l

Tested on activated sludge micro organisms

Duration of test 3 hrs

13) Disposal Considerations

The relevant EC directives and local, regional and national regulations must be complied with.

Waste: May be incinerated in a suitable facility provided local regulations are observed.

For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

After final product withdrawal, all residues must be removed from containers (drip-free, powder-free or paste-free). Once the product residues, adhering to the walls of the containers have been rendered harmless, the product and hazard labels must be invalidated. Containers must be recycled in compliance with national legislation and environmental regulations.

14) Transport Information

GGV See/IMDG Code: -- UN No EmS: --
PG: -- MPO: --
GGVSE: Class:-- PG: -- RID/ADR: Class: -- PG: --
ADNR: Class:-- PG: -- Cat: -- ICAO/IATA-DGR: not restricted
Declaration for Land Shipment: --
Declaration for Sea Shipment: --
Declaration for Shipment by Air: --

Other Information:

Not dangerous cargo. Irritating to skin and mucous membranes. Avoid temperatures below 0°C. Avoid heat above +50°C. Keep dry. Keep away from food-stuffs, acids and alkalis.

15) Regulatory Information

Classification in accordance with (Chemicals Hazard Information and Packaging) CHIP Regulations 1993.

Symbol Xn

Contains diphenylmethane -4,4-diisocyanate through inhalation contains isocyanates. See information supplied by the manufacturer.

R20: Harmful by inhalation.

R36/37/38: Irritating to eyes, respiratory system and skin.

R42: May cause sensitisation by inhalation.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28: After contact with skin wash immediately with plenty of water and seek medical advice.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

S45: In case of accident or if you feel unwell, seek medical advice immediately.

Show label where possible.

16) Additional Information

This product should be used as directed by EnviroStik Ltd. For further information consult the application data sheet.

This Safety Data Sheet was compiled using the current safety information supplied by the distributors of the component materials. This leaflet may contain inappropriate information under particular conditions of use.

*These figures are typical and do not constitute a specification.