

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: **PLASTIC STEEL LIQUID (B) RESIN**
 Supplier: **ITW Devcon**
Shannon Industrial Estate **Brunel Close, Park Farm Ind. Est.,**
Co. Clare, Ireland. **Wellingborough, Northants NN8 6QX**
 Emergency telephone number: **353(61)471299** **01933 675299**
 Fax No: **353(61)471285** **01933 670800**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation

Chemical Name	CAS-No	EEC-No	Class	Weight %
BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}	25068-38-6	603-074-00-8	Xi; R36/38 R43 N; R51, R53	30-60

3. HAZARDS IDENTIFICATION

Most important hazards: **Moderate skin irritation. N - Dangerous for the environment.**
 Specific hazards **Irritating to eyes and skin. May cause sensitization by skin contact.**

4. FIRST AID MEASURES

General advice: **Show this safety data sheet to the doctor in attendance. Avoid contact with skin and eyes.**
 Inhalation: **Move to fresh air. Consult a physician after significant exposure.**
 Skin contact: **Remove immediately adhering matter, Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.**
 Eye contact: **In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.**
 Ingestion: **Rinse mouth, Do not induce vomiting, Call a physician immediately. If a person vomits when lying on his back, turn over on his side.**

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: **dry powder, foam, Carbon Dioxide (CO₂)**
 Extinguishing media which must not be used for safety reasons:
High volume water jet.
 Specific hazards: **Burning produces irritant fumes.**
 Special protective equipment for firefighters: **In case of fire, wear a self contained breathing apparatus, protective suit.**
 Specific methods: **Standard procedure for chemical fires.**

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: **Avoid contact with the skin and the eyes. Use personal protective equipment. Ensure adequate ventilation.**
 Environmental precautions: **Do not contaminate water. Avoid subsoil penetration.**
 Methods for cleaning up: **Dam up, Scrape up, Soak up with inert absorbent material, Transfer to covered steel drums.**

7. HANDLING AND STORAGE

Handling: **Use only in well-ventilated areas. Keep away from heat and sources of ignition. General industrial hygiene practice.**
 Storage: **Keep containers tightly closed in a cool, well-ventilated place.**

Product name: **PLASTIC STEEL LIQUID
(B) RESIN**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name: National occupational exposure limits:
BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT} no data available

Engineering measures to reduce exposure

- Respiratory protection: No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.
- Hand protection: Solvent-resistant gloves (butylrubber)
- Eye protection: safety glasses with side-shields, goggles.
- Skin and body protection: Wear as appropriate.

Hygiene measures: Wash hands before breaks and immediately after handling the product, Keep away from food, drink and animal feeding stuffs. Do not smoke. General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	viscous liquid	Colour:	dark grey	Odour:	slight
pH:	(50 g/l H ₂ O)		7.0		
Boiling point/range:			>260 °C		
Flash point:			> 204 °C		
Melting point/range:			n/d °C		
Autoignition temperature:			>300 °C		
Explosive properties:			Not applicable.		
Vapour pressure:		0.03	mm Hg	(20 °C)	
Relative density:		- lower	2.80	(20 °C)	
Water solubility			negligible		

10. STABILITY AND REACTIVITY

Stability: Stable.

Conditions to avoid: Prolonged heating at temperatures above 50°C.

Materials to avoid: strong acids and oxidizing agents, amines.

Hazardous decomposition products: carbon oxides, aldehydes, acids.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Epoxy constituents: LD50/oral/rat = 30g/Kg
 LD50/dermal/rabbit = > 20 ml/Kg
 LC50/inhalation/4h/rat = fatality = 0

Local effects: Moderate skin irritation.

Sensitization: May cause sensitization by skin contact.

Long term toxicity: Components of the product may be absorbed into the body by inhalation and ingestion.. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

12. ECOLOGICAL INFORMATION

Mobility: Do not contaminate water. Do not let product enter drains.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Solidify unexposed surplus and dispose of together with processed material as cured plastic waste - In accordance with local and national regulations.

Contaminated packaging: In accordance with local and national regulations.

European waste Catalogue No: 08 04 99

14. TRANSPORT INFORMATION

Proper shipping name: Not classified as dangerous in the meaning of transport regulations:
UN, ADR/RID, IMO & IATA/ICAO.

15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations
93/21/EEC

- Contains: **BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}**

water contaminating: 2

- Symbol(s):



Xi



N -
Dangerous
for the
environment

R -phrase(s): R43 - May cause sensitization by skin contact. R36 - Irritating to eyes. R38 - Irritating to skin. R51 - Toxic to aquatic organisms. R53 - May cause long-term adverse effects in the aquatic environment.

S -phrase(s): S28 - After contact with skin, wash immediately with plenty of water. S37/39 - Wear suitable gloves and eye/face protection.

VBF: None

16. OTHER INFORMATION

Recommended use: **Adhesives.**

Recommended restrictions:

When used in a mixture, read the labels and safety data sheets of all components.

Revision date: **07/01/2003.**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: **LIQUID HARDENER.**
 Supplier: ITW Devcon
 Shannon Industrial Estate Brunel Close, Park Farm Ind. Est.,
 Co. Clare, Ireland. Wellingborough, Northants NN8 6QX
 Emergency telephone number: 353(61)471299 01933 675299
 Fax No: 353(61)471285 01933 670800

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation	Formulated product.				
Chemical Name	CAS-No	EEC-No	Class	Weight %	
2-PIPERAZINE-1-YLETHYLAMINE	140-31-8	612-105-00-4	Xn; R21/22 C; R34 R43 R52/53	1-15	
TRIETHYLENETETRAMINE	112-24-3	612-059-00-5	Xn; R21 C; R34 R43 R52,53	30-60	

3. HAZARDS IDENTIFICATION

Most important hazards: Corrosive, severe irritation. Harmful to aquatic organisms, May cause long-term adverse effects in the aquatic environment.
 Specific hazards Sensitization.

4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance, Do not breath vapours or spray mist, Avoid contact with skin and eyes.
 Inhalation: Move to fresh air, Consult a physician after significant exposure.
 Skin contact: Remove immediately adhering matter. Wash off immediately with soap and plenty of water, If skin irritation persists, call a physician.
 Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
 Ingestion: Do not induce vomiting. Drink plenty of water. Call a physician immediately.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray, dry chemical, foam, Carbon Dioxide (CO₂).
 Extinguishing media which must not be used for safety reasons:
 Do not use a solid water stream as it may scatter and spread fire.
 Specific hazards: In case of fire and/or explosion do not breathe fumes.
 Special protective equipment for firefighters: In case of fire, wear a self contained breathing apparatus, protective suit.
 Specific methods: Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with skin and eyes. Use personal protective equipment. Ensure adequate ventilation.
 Environmental precautions: Avoid subsoil penetration. Do not let product enter drains.
 Methods for cleaning up: Dam up, Scrape up, Soak up with inert absorbent material. Shovel into suitable container for disposal.

7. HANDLING AND STORAGE

Handling: Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin and eyes.

Product name: LIQUID HARDENER.

PRINT DATE: 19/03/2003

REF: X0014

Storage: Store at room temperature in the original container. Keep container tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name:	National occupational exposure limits:
2-PIPERAZINE-1-YLETHYLAMINE	no data available
TRIETHYLENETETRAMINE	no data available

Engineering measures to reduce exposure

- Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.
- Hand protection: solvent-resistant gloves.
- Eye protection: safety glasses with side-shields, goggles.
- Skin and body protection: Wear as appropriate.

Hygiene measures: Keep away from food, drink and animal feeding stuffs, When using do not eat or drink. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing. General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid.	Colour:	amber.	Odour:	amine-like.
pH:	(50 g/l H ₂ O)	10.5	(20 °C)		
Boiling point/range:		232	°C		
Flash point:		>93	°C		
Melting point/range:		n/a	°C		
Flammability (solid, gas):		Not applicable			
Vapour pressure:		<0.01	mm Hg	(20 °C)	
Relative density:		- lower	0.98	(20 °C)	
Water solubility		30-60 %			

10. STABILITY AND REACTIVITY

Stability: Stable.

Conditions to avoid: Prolonged heating at temperatures above.

Materials to avoid: oxidizing agents, Nitrous acid and other nitrosating agents.

Hazardous decomposition products: carbon oxides, Ammonia, nitrogen oxides (NO_x), amines.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD₅₀/oral/rat = 2000mg/kg.
LD₅₀/dermal/rabbit = 820mg/kg.

Local effects: Severe eye irritation (rabbit).

Sensitization: Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Long term toxicity: Prolonged or repeated exposure may cause injuries to liver, kidneys, lungs, nerves and hereditary factors.

Repeated or prolonged exposure: Components of the product may be absorbed into the body by inhalation, ingestion and through the skin.

12. ECOLOGICAL INFORMATION

Mobility: Do not let product enter drains.

Persistence / degradability: Avoid subsoil penetration.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Solidify unexposed surplus and dispose of together with processed material as cured plastic waste - In accordance with local and national regulations.

Contaminated packaging: Empty containers can be landfilled after cleaning, when in compliance with local regulations.

European waste Catalogue No: 08 04 99.

14. TRANSPORT INFORMATION

Proper shipping name: Not classified as dangerous in the meaning of transport regulations: UN, ADR/RID, IMO & IATA/ICAO..

15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations 93/21/EEC

- Contains: TRIETHYLENETETRAMINE.

water contaminating: 2

- Symbol(s):



C - Corrosive

R -phrase(s): R34 - Causes burns. R43 - May cause sensitization by skin contact. R21 - Also harmful in contact with skin. R52 - Harmful to aquatic organisms. R53 - May cause long-term adverse effects in the aquatic environment.

S -phrase(s): S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

VbF: None

16. OTHER INFORMATION

Recommended use: Adhesives.

Recommended restrictions:

When used in a mixture, read the labels and safety data sheets of all components.

Revision date: 18/07/2002

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication