

J-B WELD COMPANY

Unit 3 Polygon Business Centre, Blackthorne Road, Colnbrook, Slough, Berkshire SL3 0QT
Tel: (01753) 683311 Fax: (01753) 681419 Email: jbweldco@aol.com

HEALTH AND SAFETY DATA SHEET FOR INDUSTROWELD EPOXY STEEL HARDENER

1. Identification of the Product

Commercial Name Industroweld Epoxy Steel Hardener
48105 (48171)

Name and Address of Supplier J-B Weld Company Ltd.
European Headquarters
Unit 3 Polygon Business Centre
Blackthorne Road
Poyle Trading Estate
Colnbrook, Slough
Berkshire SL3 0QT
Tel: (01753) 683311
Fax: (01753) 681419
Email: jbweldco@aol.com

2. Composition/information on Ingredients

Substance present	CAS No.	EINECS No.	R No.	Conc range
Calcium carbonate	471-34-1	207-439-9	unclassified	over 30%
Barium sulphate	7727-43-7	231-784-4	unclassified	15-30%
Magnesium silicate	1343-88-0	215-681-1	unclassified	5-15%
Titanium Dioxide	13463-67-7	236-675-5	unclassified	1-5%
Furfuryl alcohol	98-00-0	202-626-1	R20/21/22	1-5%
Modified polyamide			R41-38/37	15-30%

3. Hazards Identification

Human

If ingested may cause some irritation to the mouth and upper digestive tract.

May cause significant skin irritation especially if exposure is prolonged and/or repeated.

Unlikely to cause damage to internal organs following skin contact.

Contact with the eyes can cause severe irritation. If not washed out promptly, will injure the eye tissue and permanent damage may result.

Inhalation may cause significant irritation of the nose and upper respiratory tract.

Safety

Not classified as "Dangerous" according to the criteria for safety.

Ecological

Under review.

Discharge of large quantities into the aquatic environment may kill fish and other aquatic organisms.

4. First Aid

If ingested, wash out the mouth with water. Do not induce vomiting. Seek medical advice.

In cases of skin contact, wash the skin with soap and water. Seek medical attention if skin appears damaged.

In cases of eye contact, immediately wash out the eye with plenty of water for at least 15 minutes holding the eye open. Seek medical attention urgently.

In cases of inhalation, remove from exposure. Keep warm and at rest. If breathing stops or shows signs of failing apply artificial ventilation. Seek medical attention urgently.

5. Fire-Fighting Measures

Fumes containing carbon dioxide, carbon monoxide, amine vapours and oxides of nitrogen may be formed in large fires.

In case of fire use powder, foam, sand, water spray.

Avoid using large quantities of water.

In case of fire, cool the storage tank with water spray.

In case of fire, self contained breathing apparatus should be worn.

6. Accidental Release Measures

Contain and collect spillage.

Absorb on to sand/kieselguhr or other inert material.

Failure to contain a release must be notified to both the local authority and J-B Weld Company Ltd.

Wear impervious gloves/overalls, eye protection and a vapour absorbing face mask while clearing up the spillage.

May make floor very slippery.

Do not wash into the drains.

Place in plastics barrels for disposal.

Do not mix with other waste materials.

Dispose of in accordance with State and local authority regulations.

Seek advice from the local waste authority or seek guidance from J-B Weld Company Ltd.

7. Handling and Storage

Store in the containers, as supplied, at between 5 and 40 degrees Centigrade.

Do not store close to strong oxidising agents which could aggravate any fire situation.

Use in a well ventilated area.

Store product in the dark.

8. Exposure Control/Personal Protection

Avoid contact with eyes, skin and clothes. Avoid inhaling any odour.

Working procedures should be designed to minimise worker exposure to this product. Where this is not possible the following personal protective equipment should be provided.

Hand protection: Impervious gloves must be worn.

Skin protection: Protective overalls and shoes/boots recommended

Eye protection: Safety face shield must be worn.

Respiratory protection: Adequate respiratory protection must be worn.

All personal protective equipment must comply with the appropriate EEC (CE) standards and should be maintained and stored to ensure continued suitability for use. Where necessary workers should be trained in the effective use of the personal protective equipment provided.

Occupational exposure limits

Calcium carbonate	8 Hr TWA 10mg/m ³ total inhal dust, 5mg/m ³ resp dust.
Barium sulphate	OES - 8 hr. TWA 2mg/m ³ EH40/93
Furfuryl alcohol	8 hr TWA 20 mg/m ³ EH40/93

9. Physical and Chemical Properties

Appearance	White paste
Odour	Characteristic
Relative Density	1.15
Solubility in Water	Insoluble

10. Stability and Reactivity

May react with strong oxidants.
Decomposition can occur above 100deg C after loss of any volatile components.

11. Toxicological Information

LD50(oral rat)>2000mg/kg
Not classified as "Harmful if swallowed". May cause some irritation of the mouth and upper digestive tract.
May produce significant skin irritation after prolonged contact.
May cause severe, possibly permanent eye damage.
May cause significant irritation of the nose and upper respiratory tract.

12. Ecological Information

Under review
Do not release into surface waters.

13. Disposal Considerations

When disposing of waste or surplus material avoid contact with the eye and skin. Impervious gloves/overalls, a face shield and adequate respiratory protection must be worn.
Do not wash into the drains.
Do not mix with other waste materials.
Seek advice from the local waste authority or seek advice from J-B Weld Company Ltd.

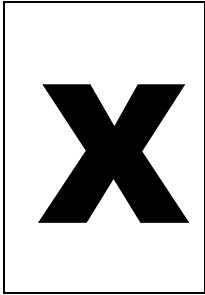
14. Transport Information

Not classified as "Hazardous for Transport".

15. Regulatory Information

This preparation has been assessed using the health and safety criteria laid down in the EEC Directives on the Control of Dangerous Substances and Preparations. It is found to be not classified using the safety criteria but is classified as "Dangerous" according to the health criteria and should be labelled:-

Health Hazard symbol **Xi**
IRRITANT



- | | |
|------------------|--|
| R38/37 | Irritating to skin and the respiratory system. |
| R41 | Risk of serious damage to eyes. |
| R37 | Irritating to respiratory system. |
| S2 | Keep out of reach of children. |
| S46 | If swallowed, seek medical advice immediately and show this container or label. |
| S24/25 | Avoid contact with skin and eyes. |
| S36/37/39 | Wear suitable protective clothing, suitable gloves and eye/face protection. |
| S28 | After contact with the skin, wash immediately with plenty of soap and water. |
| S26 | In case of contact with eyes, rinse immediately with plenty of water. Seek medical advice. |

This safety data sheet is accurate to the best of J-B Weld Company Ltd's knowledge and is based on information which it considers to be reliable. It is furnished without warranty.

Edition Number 2 Revised classification

Date of issue 06/12/02

J-B WELD COMPANY

Unit 3 Polygon Business Centre, Blackthorne Road, Colnbrook, Slough, Berkshire SL3 0QT

HEALTH AND SAFETY DATA SHEET FOR INDUSTROWELD EPOXY STEEL RESIN

1. Identification of the Product

Commercial Name Industroweld Epoxy Steel Resin
48102 (48170)

Name and Address of Supplier J-B Weld Company Ltd.
European Headquarters
Unit 3 Polygon Business Centre
Blackthorne Road
Poyle Trading Estate
Colnbrook, Slough
Berkshire SL3 0QT
Tel: (01753) 683311
Fax: (01753) 681419
Email: jbweldco@aol.com

2. Composition/information on Ingredients

Substance present	CAS No.	EINECS No.	R No.	Conc range
Calcium carbonate	471-34-1	207-439-9	unclassified	over 30%
Iron	7439-89-6	231-096-4	unclassified	15-30%
Aluminium	7429-90-5	231-072-3	unclassified	5-15%
Bisphenol-A-polyglycidyl ether	25066-38-6	polymer	R43-36/38	over 30%
Silica (amorphous)	7361-86-9	231-545-4	unclassified	5-15%

3. Hazards Identification

Human

If ingested may cause some irritation to the mouth and upper digestive tract.
May cause significant skin irritation especially if exposure is prolonged and/or repeated.
May produce allergy by skin contact especially after prolonged and/or repeated skin exposure.
May cause significant eye irritation.
Inhalation of the vapour may cause irritation to the nose and upper respiratory tract.

Safety

Not classified as "Dangerous" according to the criteria for safety.

Ecological

Under review.

Discharge of large quantities into the aquatic environment may kill fish and other aquatic organisms.

4. First Aid

If ingested, wash out the mouth with water. Do not induce vomiting. Seek medical advice.

In cases of skin contact, wash the skin with soap and water. Seek medical attention if skin appears damaged.

In cases of eye contact, immediately wash out the eye with plenty of water for at least 10 minutes holding the eye open. Seek medical attention if symptoms persist.

In cases of inhalation, remove from exposure. Keep warm and at rest.

5. Fire-Fighting Measures

Fumes containing carbon dioxide and carbon monoxide may be formed in large fires.

In case of fire use powder, foam, sand, water spray.

Avoid using large quantities of water.

In case of fire, cool the storage tank with water spray.

In case of fire, self contained breathing apparatus should be worn.

6. Accidental Release Measures

Contain and collect spillage.

Absorb on to sand/kieselguhr or other inert material.

Failure to contain a release must be notified to both the local authority and J-B Weld Company Ltd.

Wear impervious gloves/overalls, eye protection and a vapour absorbing face mask while clearing up the spillage.

May make floor very slippery.

Do not wash into the drains.

Place in plastics barrels for disposal.

Do not mix with other waste materials.

Dispose of in accordance with State and local authority regulations.

Seek advice from the local waste authority or seek guidance from J-B Weld Company Ltd.

7. Handling and Storage

Store in the containers, as supplied, at between 5 and 40 degrees Centigrade.

Do not store close to strong oxidising agents which could aggravate any fire situation.

Use in a well ventilated area.

Store product in the dark.

8. Exposure Control/Personal Protection

Avoid contact with eyes, skin and clothes. Avoid inhaling any odour.

Working procedures should be designed to minimise worker exposure to this product. Where this is not possible the following personal protective equipment should be provided.

Hand protection: Impervious gloves must be worn.

Skin protection: Protective overalls and shoes/boots recommended

Respiratory protection: Adequate vapour absorbing face mask respiratory protection recommended.

Eye protection: Chemical safety goggles recommended.

All personal protective equipment must comply with the appropriate EEC (CE) standards and should be maintained and stored to ensure continued suitability for use. Where necessary workers should be trained in the effective use of the personal protective equipment provided.

Occupational exposure limits

Calcium carbonate	8 Hr TWA 10mg/m ³ total inhal dust, 5mg/m ³ resp dust. EH40/93
Aluminium	8 Hr TWA 10mg/m ³ total inhalable dust, 5mg/m ³ respirable dust EH40/93
Silica (amorphous)	8 hr TWA 6mg/m ³ inhal dust, 3mg/m ³ resp dust EH40/93

9. Physical and Chemical Properties

Appearance	Dark smooth paste
Odour	Characteristic
Relative Density	1.17
Solubility in Water	Not soluble

10. Stability and Reactivity

May react with strong oxidants.
Decomposition can occur above 100deg C after loss of any volatile components.

11. Toxicological Information

LD50(oral rat)>2000mg/kg
Not classified as "Harmful if swallowed". May cause some irritation of the mouth and upper digestive tract.
May produce significant skin irritation after prolonged contact.
Has potential to cause sensitisation following repeated and/or prolonged skin contact.
May cause significant eye irritation.
Inhalation of the vapour may cause irritation of the nose and upper respiratory tract.

12. Ecological Information

Under review
Do not release into surface waters.

13. Disposal Considerations

When disposing of waste or surplus material avoid contact with the eye and skin. Wear impervious gloves/overalls, chemical safety goggles and suitable respiratory protection.
Do not wash into the drains.
Do not mix with other waste materials.
Seek advice from the local waste authority or seek advice from J-B Weld Company Ltd.

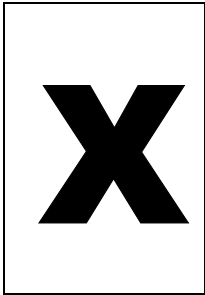
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Not classified as "Hazardous for Transport".

15. Regulatory Information

This preparation has been assessed using the health and safety criteria laid down in the EEC Directives on the Control of Dangerous Substances and Preparations. It is found to be not classified using the safety criteria but is classified as "Dangerous" according to the health criteria and should be labelled:-

Health Hazard symbol Xi
IRRITANT



R36/38 **Irritating to eyes and skin.**
R43 **May cause sensitisation by skin contact.**
S2 **Keep out of reach of children.**
S46 **If swallowed, seek medical advice immediately and show this container or label.**

S24/25 **Avoid contact with skin and eyes.**
S36/37/39 **Wear suitable protective clothing, suitable gloves and eye/face protection.**

S28 **After contact with the skin, wash immediately with plenty of soap and water.**
S26 **In case of contact with eyes, rinse immediately with plenty of water. Seek medical advice.**

“Contains epoxy constituents. See information supplied by the manufacturers”.

Chemicals to be reported on the label

Bisphenol-A-polyglycidyl ether

This safety data sheet is accurate to the best of J-B Weld Company Ltd's knowledge and is based on information which it considers to be reliable. It is furnished without warranty.

Edition Number 1

Date of issue 06/12/02