

**J-B Weld Company**

P.O. Box 483  
 1130 Como Street  
 Sulphur Springs, TX 75482  
 Tel: (903) 885-7696  
 Fax: (903) 885-5911

**SECTION I - IDENTIFICATION OF PRODUCT**

**PRODUCT NAME:** J B WELD EPOXY STEEL HARDENER  
**PRODUCT CODE:** (48008), 48105, 48155, 48171  
**SYNONYM/CROSS REFERENCE:** Epoxy Hardener  
**SCHEDULE B NUMBER:** 3506.91.0000-3

**SECTION II - HAZARDOUS INGREDIENTS**

INGREDIENTS	WGT%	CAS #	TLV/PEL
Calcium Carbonate	30-40%	1317-65-3	ACGIH TWA 10 mg/m <sup>3</sup> OSHA PEL 15 mppcf
Barium Sulfate	20-30%	7727-43-7	ACGIH TWA 10 mg/m <sup>3</sup> OSHA PEL 2 mppcf
Magnesium Silicate	5-10%	14807-96-6	ACGIH TWA 2 mg/m <sup>3</sup> OSHA PEL 20 mppcf
Titanium Dioxide	1-5%	13463-67-7	ACGIH TWA 10 mg/m <sup>3</sup> OSHA PEL 20 mg/m <sup>3</sup>
Zinc Sulfide	0-5%	1314-98-3	ACGIH TLV 10 mg/m <sup>3</sup>
Furfuryl Alcohol	1-5%	98-00-0	ACGIH TWA 10 ppm
Polyamide Resin	15-25%	68410-23-1	N/E
Aminophenols	1-5 %	Mixture	N/E

**SECTION III - PHYSICAL DATA**

**APPEARANCE:** White Paste  
**SPECIFIC GRAVITY:** 1.78  
**VAPOR PRESSURE (mmHG):** N/A<sub>v</sub>  
**BOILING POINT:** N/A<sub>v</sub>  
**VAPOR DENSITY:** Heavier than air  
**EVAPORATION RATE (Ethyl Ether = 1):** Slower than Ethyl Ether  
**VOLATILES BY WEIGHT:** Nil  
**SOLUBILITY IN WATER:** Not Soluble  
**VOC:** Grams/Liter = 72  
 Lbs/Gallon = 0.6

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## SECTION IV - FIRE AND EXPLOSION DATA

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**FLASH POINT:** >200°F/93°C Seta Flash Closed cup

**LOWER FLAMMABLE LIMIT %:** N/E

**UPPER FLAMMABLE LIMIT %:** N/E

**FIRE EXTINGUISHING MEDIA:** Carbon Dioxide, Dry Chemical, Foam

**SPECIAL FIRE FIGHTING PROCEDURES:** Fight like a fuel oil fire. Cool fire exposed containers with water spray. Firefighter should wear OSHA/NIOSH approved self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARD:** Closed containers exposed to high temperatures, such as fire conditions may rupture.

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## SECTION V - HEALTH HAZARD/TOXICOLOGICAL PROPERTIES

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### **OVEREXPOSURE EFFECTS:**

#### **ACUTE EFFECTS:**

**EYES:** Contact with eyes can cause severe irritation, redness, tearing, blurred vision, and/or swelling. May cause eye damage.

**SKIN:** Contact with skin can cause irritation, (minor itching, burning and/or redness), Dermatitis, defatting may be readily absorbed through the skin.

**INHALATION:** Inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and/or asphyxiation. Aspiration of material into lungs may result in chemical pneumonitis which can be fatal.

**INGESTION:** Ingestion can cause gastrointestinal irritation, nausea, vomiting, diarrhea.

#### **CHRONIC EFFECTS:**

Overexposure to this material has apparently been known to cause the following effects in lab animals: Eye damage, skin damage.

**CARCINOGEN:** YES        NO  X  

**TERATOGEN:** YES        NO  X  

**MUTAGEN:** YES        NO  X  

**PRIMARY ROUTES OF EXPOSURE:** Skin, inhalation

### **FIRST AID:**

**INHALATION:** If inhaled, remove victim from exposure to a well-ventilated area. Make them comfortably warm, but not hot. Use oxygen or artificial respiration as required. Consult a physician.

**SKIN:** For skin contact, wash promptly with soap and excess water.

**EYES:** For eye contact, flush promptly with excess water for at least fifteen minutes. Consult a physician.

**INGESTION:** If ingested, do not induce vomiting. Give victim a glass of water. Call a physician immediately.

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## SECTION VI - REACTIVITY DATA

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**STABILITY:** Stable

**CONDITIONS TO AVOID:** Open flames, sparks, heat, electrical and static discharge.

**INCOMPATIBILITY MATERIALS TO AVOID:** Strong acids, alkalis, oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon Dioxide, Carbon Monoxide and Carbon.

**HAZARDOUS POLYMERIZATION:** Will not occur.

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## SECTION VII - SPILL AND DISPOSAL PROCEDURE

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**SPILLS, LEAK OR RELEASE:** Ventilate area. Remove all possible sources of ignition. Avoid prolonged breathing of vapor. Contain spill with inert absorbent.

**WASTE DISPOSAL:** Dispose of in accordance with local, state, and federal regulations.

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## SECTION VIII - PROTECTION INFORMATION

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**RESPIRATORY PROTECTION:** If component TLV limits are exceeded, use NIOSH/MSHA approved respirator to remove vapors. Use an air-supplied respirator if necessary.

**VENTILATION:** Use adequate ventilation in volume and pattern to keep TLV/PEL below recommended levels. Explosion-proof ventilation may be necessary.

**PROTECTIVE GLOVES:** To prevent prolonged exposure use rubber gloves; solvents may be absorbed through the skin

**EYE PROTECTION:** Safety Glasses or goggles with splash guards or side shields.

**OTHER PROTECTIVE EQUIPMENT:** Wear protective clothing as required to prevent skin contact.

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## SECTION IX - HANDLING AND STORAGE PRECAUTIONS

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**STORAGE AND HANDLING:** Use with adequate ventilation. Avoid contact with eyes and skin. Avoid breathing vapors. Do not store the product above 100°F/38°C. Do not flame, cut, braze weld or melt empty containers. Keep the product away from heat, open flame, and other sources of ignition. Avoid contact with strong acids, alkalis and oxidizers.

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## SECTION X - ADDITIONAL INFORMATION

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**SHIPPING INFORMATION:** Please comply with DOT regulations in USA

HMIS RATING:	Health	2	4 = Extreme
	Fire	1	3 = High
	Reactivity	1	2 = Moderate
			1 = Slight
			0 = Insignificant

Personal Protection - See Section VIII

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**CALIFORNIA PROPOSITION 65:**

Trace amounts of some chemicals known to the State of California to cause cancer, birth defects or other reproductive harm may be present in this product.

**SECTION 313 SUPPLIER NOTIFICATION:**

This product contains the following toxic chemicals subject to the reporting requirements of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372:

<u>CHEMICAL NAME</u>	<u>CAS</u>	<u>% BY WGT</u>
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**NOT APPLICABLE**

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS THAT ARE COPIED AND DISTRIBUTED FOR THIS CHEMICAL

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**ABBREVIATIONS**

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IARC	= International Agency for Research on Cancer
ACGIH	= American Conference of Governmental Industrial Hygienists
NIOSH	= National Institute of Occupational Safety and Health
TLV	= Threshold Limit Value
PEL	= Permissible Emission Level
DOT	= Department of Transportation
NTP	= National Toxicology Program
N/AV	= Not Available
N/AP	= Not Applicable
N/E	= Not Established
N/D	= Not Determined

**PREPARED FOR:**

**J-B Weld Company**

P.O. Box 483  
1130 Como Street  
Sulphur Springs, TX 75482  
Tel: (903) 885-7696  
Fax: (903) 885-5911

REVIEWED ON	May 17, 2004
SUPERSEDES	June 23, 2003
REVISION	Format

The information in the Material Safety Data Sheet has been compiled from our experience and from data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the adoption of the safety precautions as may be necessary. We reserve the right to revise Material Safety Data Sheets from time to time as new technical information becomes available. The user has the responsibility to contact the Company to make sure that the MSDS is the latest one issued.

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**SECTION I - IDENTIFICATION OF PRODUCT**

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**PRODUCT NAME:** JB WELD - EPOXY STEEL RESIN  
**PRODUCT CODE:** (48009), 48102, 48153, 48170  
**SYNONYM/CROSS REFERENCE:** Resin Solution  
**SCHEDULE B NUMBER:** 3506.91.0000

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**SECTION II - HAZARDOUS INGREDIENTS**

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INGREDIENTS	WGT%	CAS #	TLV/PEL
Calcium Carbonate	40-50%	1317-65-3	ACGIH: TWA 10 mg/m <sup>3</sup> OSHA: PEL 15 mppcf
Iron Powder	10-20%	65997-19-5	ACGIH TLV 15 mg/m <sup>3</sup> OSHA: PEL 15 mppcf
Epoxy Resin	30-40%	25068-38-6	N/E
Aromatic Hydrocarbons	1-5 %	64742-94-5	N/E

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**SECTION III - PHYSICAL DATA**

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**APPEARANCE:** Dark gray or black smooth paste

**SPECIFIC GRAVITY:** 1.80

**VAPOR PRESSURE (mmHG):** N/A<sub>v</sub>

**BOILING POINT:** N/E

**VAPOR DENSITY:** Heavier than air

**EVAPORATION RATE (Ethyl Ether = 1):** Slower than Ethyl Ether

**VOLATILES BY WEIGHT:** N/D

**SOLUBILITY IN WATER:** Not Soluble

**VOC:** Grams/Liter = Nil

Lbs/Gallon = Nil

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## SECTION IV - FIRE AND EXPLOSION DATA

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**FLASH POINT:** >200°F/ 93°C Seta Flash Closed cup

**LOWER FLAMMABLE LIMIT %:** N/E

**UPPER FLAMMABLE LIMIT %:** N/E

**FIRE EXTINGUISHING MEDIA:** Carbon Dioxide, Dry Chemical, Foam

**SPECIAL FIRE FIGHTING PROCEDURES:** Fight like a fuel oil fire. Cool fire exposed containers with water spray. Firefighter should wear OSHA/NIOSH approved self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARD:** Closed containers exposed to high temperatures, such as fire conditions may rupture.

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## SECTION V - HEALTH HAZARD/TOXICOLOGICAL PROPERTIES

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**OVEREXPOSURE EFFECTS:**

**ACUTE EFFECTS:**

**EYES:** Contact with eyes can cause irritation, redness, tearing, blurred vision, and/or swelling.

**SKIN:** Contact with skin can cause irritation, (minor itching, burning and/or redness), Dermatitis, defatting may be readily absorbed through the skin.

**INHALATION:** Inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and/or asphyxiation. Aspiration of material into lungs may result in chemical pneumonitis which can be fatal.

**INGESTION:** Ingestion can cause gastrointestinal irritation, nausea, vomiting, diarrhea.

**CHRONIC EFFECTS:**

Overexposure to this material has apparently been known to cause the following effects in lab animals: skin sensitization, respiratory system irritation.

**CARCINOGEN:** YES        NO  X 

**TERATOGEN:** YES        NO  X 

**MUTAGEN:** YES        NO  X 

**PRIMARY ROUTES OF EXPOSURE:** skin, inhalation, eyes

**FIRST AID:**

**INHALATION:** If inhaled, remove victim from exposure to a well-ventilated area. Make them comfortably warm, but not hot. Use oxygen or artificial respiration as required. Consult a physician.

**SKIN:** For skin contact, wash promptly with soap and excess water.

**EYES:** For eye contact, flush promptly with excess water for at least fifteen minutes. Consult a physician.

**INGESTION:** If ingested, do not induce vomiting. Give victim a glass of water. Call a physician immediately.

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## SECTION VI - REACTIVITY DATA

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**STABILITY:** Stable

**CONDITIONS TO AVOID:** Open flames & heat.

**INCOMPATIBILITY MATERIALS TO AVOID:** Strong acids, alkalis, oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon Dioxide, Carbon Monoxide and Carbon.

**HAZARDOUS POLYMERIZATION:** Will not occur.

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## SECTION VII - SPILL AND DISPOSAL PROCEDURE

---

**SPILLS, LEAK OR RELEASE:** Ventilate area. Remove all possible sources of ignition. Avoid prolonged breathing of vapor. Contain spill with inert absorbent.

**WASTE DISPOSAL:** Dispose of in accordance with local, state, and federal regulations.

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## SECTION VIII - PROTECTION INFORMATION

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**RESPIRATORY PROTECTION:** If component TLV limits are exceeded, use NIOSH/MSHA approved respirator to remove vapors. Use an air-supplied respirator if necessary. With general ventilation, does not require a respirator.

**VENTILATION:** Use adequate ventilation in volume and pattern to keep TLV/PEL below recommended levels.

**PROTECTIVE GLOVES:** To prevent prolonged exposure use rubber gloves; solvents may be absorbed through the skin

**EYE PROTECTION:** Safety Glasses or goggles with splash guards or side shields.

**OTHER PROTECTIVE EQUIPMENT:** Wear protective clothing as required to prevent skin contact.

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## SECTION IX - HANDLING AND STORAGE PRECAUTIONS

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**STORAGE AND HANDLING:** Use with adequate ventilation. Avoid contact with eyes and skin. Avoid breathing vapors. Do not store the product above 100°F/38°C. Do not flame, cut, braze weld or melt empty containers. Keep the product away from heat, open flame, and other sources of ignition. Avoid contact with strong acids, alkalis and oxidizers.

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## SECTION X - ADDITIONAL INFORMATION

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**SHIPPING INFORMATION:** Please comply with DOT regulations in USA

<b>HMIS RATING:</b>	Health	2	4 = Extreme
	Fire	1	3 = High
	Reactivity	1	2 = Moderate
			1 = Slight
			0 = Insignificant

Personal Protection - See Section VIII

**CALIFORNIA PROPOSITION 65:**

Trace amounts of epichlorohydrin, a chemical known to the State of California to cause cancer, are present in this product. However, given the low level and application of this product, typical uses do not constitute a significant risk under the standard.

**SECTION 313 SUPPLIER NOTIFICATION:**

This product contains the following toxic chemicals subject to the reporting requirements of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372:

<u>CHEMICAL NAME</u>	<u>CAS</u>	<u>% BY WGT</u>
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Not Applicable

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ABBREVIATIONS

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IARC	= International Agency for Research on Cancer
ACGIH	= American Conference of Governmental Industrial Hygienists
NIOSH	= National Institute of Occupational Safety and Health
TLV	= Threshold Limit Value
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N/AV	= Not Available
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March 1, 2003  
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