

JB Weld CLear Weld World's strongest Bond Quick Setting Epoxy No. 50112H

SAFETY DATA SHEET

Issuing Date 28-Oct 2014

Revision Date 17-Oct-2014

Revision Number 1

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

Product identifier

Product SDS Name

Clear Epoxy Resin – Syringe – Part A

J-B Weld FG SKU Part Numbers Covered

50112, 50101, 50132, 50112-F, 50101-F, 50132-F, 80112, 40002

J-B Weld Product Names Covered

ClearWeld™ (all), PlasticWeld™ Syringe, MinuteWeld™ Syringe, Wood Restore™ Liquid Epoxy

J-B Weld Product Type

Ероху

Recommended use of the chemical and restrictions on use

Recommended Use

General Purpose Adhesive

Uses advised against

No information available

Details of the supplier of the safety data sheet

Supplier Name

J-B WELD COMPANY,LLC

Supplier Address

1130 COMO ST

SULPHUR SPRINGS, TX 75482

USA

Emergency Telephone Numbers

Transportation Emergencies: Chemtrec (24 hour transportation emergency response info):

800-424-9300 or 703-527-3887

Poison/Medical Emergencies: Poison Control Centers (24 hour emergency poison / medical

response info): 800-222-1222

Supplier Email

info@jbweld.com

Supplier Phone Number

903-885-7696



2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1

GHS Label elements, including precautionary statements

Warning

Emergency Overview

Signal word

Hazard Statements

Causes severe skin irritation

May cause an allergic skin reaction

May cause serious eye damage / eye irritation



Appearance Clear

Physical State Gel Liquid

OdorAmmoniacal

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Precautionary Statements - Response

Immediately call a doctor/physician or poison control center.

Specific treatment (see supplemental first aid instructions on this label)

⊨yes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a doctor/physician

Skin

Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

If skin irritation or rash occurs: Get medical advice/attention



Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

75% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Harmful to aquatic life with long lasting effects

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

Interactions with Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Diglycidyl bisphenol A resin	25085-99-8	95
Oxirane, [[4-(1,1-dimethylethyl)phenoxy]methyl]-	3101-60-8	5

4. FIRST AID MEASURES

4.1 Description of first aid measures

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly. Immediately remove any clothing soiled by the product. If skin irritation continues, consult a doctor.

· After eye contact:

Protect unharmed eye.

Rinse opened eye for several minutes under running water. Then consult a doctor. Do not remove contact lenses if worn.



· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

 4.2 Most important symptoms and effects, both acute and delayed Allergic reactions

Nausea

Dizziness

- · Hazards Danger of impaired breathing.
- 4.3 Indication of any immediate medical attention and special treatment needed

Treat skin and mucous membrame with antihistamine and corticoid preparations.

Monitor circulation.

5. FIRE-FIGHTING MEASURES

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 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:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information Cool endangered receptacles with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Remove persons from danger area.

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

- · 6.2 Environmental precautions: Do not allow to enter sewers/ 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).

Dispose contaminated material as waste according to item 13.

Clean the affected area carefully; suitable cleaners are:

Warm water and cleansing agent

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 disposal information.



7. HANDLING AND STORAGE

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility:

Store away from oxidizing agents.

Store away from foodstuffs.

Do not store together with acids.

- · Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · 7.3 Specific end use(s) No further relevant information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients 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.

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when aerosol or mist is formed.

· Protection of hands:



Protective gloves



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Butyl rubber, BR

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 cannot be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

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

· Eye protection:



Safety glasses

Goggles recommended during refilling

9. PHYSICAL AND CHEMICAL PROPERTIES

 9.1 Information on basic physi General Information 	ical and chemical properties		
· Appearance:			
Form:	Liquid .		
Colour:	Light yellow		
· Odour:	Characteristic		
Odour threshold:	Not determined.		
pH-value:	Not determined.		
Change in condition			
Melting point/Melting range:	Undetermined.		
Boiling point/Boiling range:	> 200°C (> 392 °F)		
Flash point:	> 93,3°C (> 200 °F)		
Flammability (solid, gaseous):	Not applicable.		
Ignition temperature:			
Decomposition temperature:	Not determined.		
Self-igniting:	Product is not selfigniting.		
Danger of explosion:	Product does not present an explosion hazard.		
Explosion limits:			
Lower:	Not determined.	Not determined.	
Upper:	Not determined.		



· Vapour pressure:	Not determined.	
Density at 20°C:	1,13 g/cm ³	
Relative density Vapour density	Not determined. · Not determined.	
· Evaporation rate	Not determined.	
Solubility in/Miscibility with water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/water Viscosity:	er): Not determined.	
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· VOC (% content)	<1%	
Dynamic:	Not determined.	
9.2 Other information	No further relevant information available.	

10. STABILITY AND REACTIVITY

- · 10.1 Reactivity
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with oxidizing agents.

Reacts with amines.

Exothermic polymerization.

- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

11. TOXICOLOGY INFORMATION

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization:

Sensitization possible through skin contact.

Sensitizing effect through inhalation is possible by prolonged exposure.



· Additional toxicological information:

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

12. ECOLOGICAL INFORMATION

- · 12.1 Toxicity
- · Aquatic toxicity: The product contains materials that are harmful to the environment.
- 12.2 Persistence and degradability: The product is not easily, but potentially degradable.
- · 12.3 Bioaccumulative potential

Due to the distribution coefficient n-octanol/water an accumulation in organisms is possible.

- · 12.4 Mobility in soil No further relevant information available.
- · 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 course or sewage system. Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

- · 13.1 Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

- · 14.1 UN-Number
- · DOT, ADR, ADN, IMDG, IATA

Not Regulated

- · 14.2 UN proper shipping name
- DOT, ADR, ADN, IMDG, IATA

Not Regulated

- 14.3 Transport hazard class(es)
- DOT, ADR, ADN
- · Class

Not Regulated



· IMDG, IATA



· Class

Not Regulated

· 14.4 Packing group

· DOT, ADR, IMDG, IATA

Not Regulated

· 14.5 Environmental hazards:

· Marine pollutant:

Not Regulated

· Special marking (IATA):

Not applicable.

· 14.6 Special precautions for user

Not applicable.

· 14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

Not applicable.

· UN "Model Regulation":

15. REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

- Proposition 65 (California):
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- Carcinogenic Categories
- EPA (Environmental Protection Agency)

None of the ingredients is listed.



· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Canada

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

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

16. OTHER INFORMATION

This information is based on our present knowledge. However, this 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.

H341: Suspected of causing genetic defects.

H411: Toxic to aquatic life with long lasting effects.

R36/38: Irritating to eyes and skin.

R38: Irritating to skin.

R43: May cause sensitisation by skin contact.

R46: May cause heritable genetic damage. R51: Toxic

to aquatic organisms.

· Abbreviations and acronyms:

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 DOT: US

Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)



Disclaimer

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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet





SAFETY DATA SHEET

Issuing Date 27-Oct 2014

Revision Date 17-Oct-2014

Revision Number 1

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

Product identifier

Product SDS Name

Clear Epoxy Hardener - Syringe - Part B

J-B Weld FG SKU Part Numbers Covered

50112, 80112, 50112-F

J-B Weld Product Names Covered

ClearWeld™ (all)

J-B Weld Product Type

Epoxy

Recommended use of the chemical and restrictions on use

Recommended Use

General Purpose Adhesive

Uses advised against

No information available

Details of the supplier of the safety data sheet

Supplier Name

J-B WELD COMPANY,LLC

Supplier Address

1130 COMO ST

SULPHUR SPRINGS, TX 75482

USA

Emergency Telephone Numbers

Transportation Emergencies: Chemtrec (24 hour transportation emergency response info):

800-424-9300 or 703-527-3887

Poison/Medical Emergencies: Poison Control Centers (24 hour emergency poison / medical

response info): 800-222-1222

Supplier Email

info@jbweld.com

Supplier Phone Number

903-885-7696

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)



Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal word

Warning

Hazard Statements

Causes severe skin irritation

May cause serious eye damage / eye irritation

May cause an allergic skin reaction



Appearance Pale yellow

Physical State Gel Liquid

Odor Ammoniacal

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see supplemental first aid instructions on this label)

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

Skin

Call a POISON CENTER or doctor/physician if you feel unwell

Wash contaminated clothing before reuse

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

If skin irritation or rash occurs: Get medical advice/attention

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell



Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Unknown Toxicity

75% of the mixture consists of ingredient(s) of unknown toxicity

Other information

Harmful to aquatic life with long lasting effects

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

Interactions with Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
2,4,6-Tri(dimethylaminomethyl)phenol	90-72-2	7 - 13
1-(2-Aminoethyl) piperazine	140-31-8	<5%
Benzyl alcohol	100-51-6	3 - 5
Ethylbenzene	100-41-4	<1%

4. FIRST AID MEASURES

First aid measures

General Advice

Immediate medical attention is required. Show this safety data sheet to the doctor

in attendance.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice. Remove contact lenses, if present and easy

to do. Continue rinsing.

Skin Contact

Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause

an allergic skin reaction.

Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct

contact with skin. Use barrier to give mouth-to-mouth resuscitation.



Ingestion

Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see section 8). Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Effects

Most Important Symptoms and Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. Itching. Rashes, Hives,

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause sensitization of susceptible persons.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May cause sensitization by skin contact.

Uniform Fire Code

Combustible Liquid: III-B Sensitizer: Liquid

Hazardous Combustion Products

Carbon oxides.

Explosion Data

Sensitivity to Mechanical Impact No. Sensitivity

to Static Discharge

No.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.



6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.

Avoid generation of dust.

Other Information

Refer to protective measures listed in Sections 7 and 8.

Environmental Precautions

Environmental Precautions

Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to

enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Use only with adequate ventilation and in closed systems. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

Incompatible Products

Acids. Bases. Oxidizing agent.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylbenzene 100-41-4	TWA: 20 ppm	TWA: 100 ppm TWA: 435 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 435 mg/m³ (vacated) STEL: 125 ppm (vacated) STEL: 545 mg/m³	IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m³ STEL: 125 ppm STEL: 545 mg/m³

Other Exposure Guidelines

See section 15 for national exposure control parameters

Appropriate engineering controls

Engineering Measures

Showers

Eyewash stations



Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Tight sealing safety goggles. Face protection shield.

Skin and Body Protection

Wear protective gloves and protective clothing. Long sleeved clothing. Chemical resistant

apron. Impervious gloves.

Respiratory Protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. For environmental protection, remove and wash all contaminated protective equipment before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State

Melting / freezing point

Flammability (solid, gas)

Flammability Limit in Air

Boiling point / boiling range

Gel Liquid

Appearance

Pale yellow

Color

No information available

Odor **Odor Threshold**

Remarks/ Method

None known

Ammoniacal

No information available

Property На

Flash Point

Evaporation Rate

<u>Values</u> UNKNOWN

No data available 100 °C / 212 °F

140 C / 284 F

No data available No data available

No data available

Upper flammability limit Lower flammability limit No data available

Vapor pressure No data available Vapor density No data available **Specific Gravity** No data available **Water Solubility** Miscible in water Solubility in other solvents No data available Partition coefficient: n-octanol/waterNo data available

Autoignition temperature No data available **Decomposition temperature** No data available

Kinematic viscosity Dynamic viscosity

Explosive properties Oxidizing Properties

No data available

No data available

No data available

No data available

<1%

No data available

Other Information

Softening Point VOC Content (%)

Particle Size **Particle Size Distribution**



10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Exposure to air or moisture over prolonged periods. Excessive heat.

Incompatible materials

Acids. Bases. Oxidizing agent.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation

Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract. Harmful by inhalation.

Eye Contact

Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.

Skin Contact

Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns. May be absorbed through the skin in harmful amounts.

Harmful in contact with skin.

Ingestion

Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Ingestion may cause irritation to mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May be harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50



2,4,6- Tri(dimethylaminomethyl)phen ol 90-72-2	= 1000 mg/kg(Rat)	= 1280 mg/kg(Rat)	-
1-(2-Aminoethyl) piperazine 140-31-8	= 2140 mg/kg (Rat)	= 880 μL/kg(Rabbit)	-
Benzyl alcohol 100- 51-6	= 1230 mg/kg (Rat)	= 2 g/kg(Rabbit)	= 8.8 mg/L (Rat) 4 h
Ethylbenzene 100- 11-4	= 3500 mg/kg (Rat)	= 15354 mg/kg (Rabbit)	= 17.2 mg/L (Rat)4 h

Information on toxicological effects

Symptoms

Erythema (skin redness). Burning. May cause blindness. Coughing and/ or wheezing.

Itching. Rashes. Hives.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

May cause sensitization of susceptible persons. May cause sensitization by skin

contact. May cause sensitization by inhalation.

Mutagenic Effects

No information available.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethylbenzene 100-	A3	Group 2B		Х
41-4				

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive Toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Chronic Toxicity

Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Contains a known or

suspected carcinogen.

Target Organ Effects

Aspiration Hazard

Respiratory system. Eyes. Skin. Gastrointestinal tract (GI). Central Nervous System (CNS).

No information available.

Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 728.00 mg/kg ATEmix (dermal)

1,140.00 mg/kg (ATE)

ATEmix (inhalation-gas)

18,750.00 ppm (4 hr)

ATEmix (inhalation-dust/mist)

6.20 mg/l

ATEmix (inhalation-vapor)

46.00 ATEmix



12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
1-(2-Aminoethyl) piperazine 140-31-8	72h EC50: = 495 mg/L (Pseudokirchneriella subcapitata)	96h LC50: > 1000 mg/L (Poecilia reticulata) 96h LC50: >= 100 mg/L (Oncorhynchus mykiss) 96h LC50: 1950 - 2460 mg/L (Pimephales promelas)	EC50 > 10000 mg/L 17 h	48h EC50: = 32 mg/L
Benzyl alcohol 100- 51-6	3h EC50: = 35 mg/L (Anabaena variabilis)	96h LC50: = 10 mg/L (Lepomis macrochirus) 96h LC50: = 460 mg/L (Pimephales promelas)	EC50 = 50 mg/L 5 min EC50 = 63.7 mg/L 15 min EC50 = 63.7 mg/L 5 min EC50 = 71.4 mg/L 30 min	48h EC50: = 23 mg/L
Ethylbenzene 100- 41-4	72h EC50: = 4.6 mg/L (Pseudokirchneriella subcapitata) 96h EC50: > 438 mg/L (Pseudokirchneriella subcapitata) 72h EC50: 2.6 - 11.3 mg/L (Pseudokirchneriella subcapitata) 96h EC50: 1.7 - 7.6 mg/L (Pseudokirchneriella subcapitata)	96h LC50: 11.0 - 18.0 mg/L (Oncorhynchus mykiss) 96h LC50: = 4.2 mg/L (Oncorhynchus mykiss) 96h LC50: 7.55 - 11 mg/L (Pimephales promelas) 96h LC50: = 32 mg/L (Lepomis macrochirus) 96h LC50: 9.1 - 15.6 mg/L (Pimephales promelas) 96h LC50: = 9.6 mg/L (Poecilia reticulata)	EC50 = 9.68 mg/L 30 min EC50 = 96 mg/L 24 h	48h EC50: 1.8 - 2.4 mg/L

Persistence and Degradability

No information available.

Bioaccumulation

No information available

Chemical Name	Log Pow
1-(2-Aminoethyl) piperazine 140- 31-8	-1.48
Benzyl alcohol 100- 51-6	1.1
Ethylbenzene 100- 41-4	3.118

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Dispose of contents/containers in accordance with local regulations.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Ethylbenzene 100- 41-4		Included in waste stream: F039		



California Hazardous Waste Codes 331

Chemical Name	California Hazardous Waste	
Ethylbenzene	Toxic	
100-41-4	Ignitable	

14. TRANSPORT INFORMATION

<u>DOT</u>

Proper Shipping Name

NOT REGULATED NON REGULATED

Hazard Class

N/A

<u>TDG</u>

Not regulated

MEX

Not regulated

ICAO

Not regulated

ΙΛΤΛ

........

<u>IATA</u>

Not regulated

Proper Shipping Name

NON REGULATED

Hazard Class

N/A

IMDG/IMO

Not regulated

Hazard Class

N/A

RID

Not regulated

ADR

Not regulated

<u>ADN</u>

Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA

Complies

DSL

All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ethylbenzene - 100-41-4	100-41-4	1 - 5	0.1

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No



CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ethylbenzene 100- 41-4	1000 lb	X	×	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Ethylbenzene 100- 41-4	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65		
Ethylbenzene - 100-41-4	Carcinogen		
II C Ctata Dialet to Marris D. 1 ()			

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
1-(2-Aminoethyl) piperazine 140- 31-8	Х	Х	X		
Benzyl alcohol 100- 51-6		х	Х		
Ethylbenzene 100- 41-4	Х	X	Х	х	Х

International Regulations

Mexico National occupational exposure limits

Component	Carcinogen Status	Exposure Limits
Ethylbenzene 100-41-4 (1 - 5)		Mexico: TWA 100 ppm Mexico: TWA 435 mg/m³
		Mexico: STEL 125 ppm
Mexico - Occupational Exposure Limite Coming		Mexico: STEL 545 mg/m ³

Mexico - Occupational Exposure Limits - Carcinogens

Canada WHMIS Hazard Class

D2A - Very toxic materials D2B - Toxic materials





16. OTHER INFORMATION

NFPA

Health Hazards 3

Flammability 1

Instability 0

Physical and

HMIS

Health Hazards 3 *

Flammability 1

Physical Hazard 0

Chemical Hazards - Personal Protection

Χ

Chronic Hazard Star Legend * = Chronic Health Hazard

Prepared By

J-B Weld Company

Revision Date

17-Oct-2014

Revision Note

No information available

Notice to reader

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End of Safety Data Sheet

