

This Material Safety Data Sheet packet contains the MSDS for the products listed below:

BOSS[®] 293 Steel Epoxy – Resin (Part A)

BOSS[®] 293 Steel Epoxy – Hardener (Part B)

Please confirm that you have the proper MSDS for the product being used.

MSDS Document

Product BOSS® 293 Epoxy Steel - Resin (Part A)

1. Chemical Product and Company Identification

Product BOSS® 293 Epoxy Steel - Resin (Part A)

MSDS ID BOSS293A

Manufacturer

Accumetric, LLC
350 Ring Road
Elizabethtown, KY 42701

Phone Number

(270) 769-3385

Emergency Phone

CHEMTREC (800) 424-9300

CHEMTREC International (703) 527-3887

Revision Date 4/15/2014

Health:	2
Fire:	1
Reactivity:	1
Stock	

2. Composition and Information on Ingredients

Ingredient	CAS Number	Weight %	ACGIH TLV	PEL	STEL
Calcium carbonate	1317-65-3	40% - 50%	10 mg/m ³	5 mg/m ³	
Calcium Carbonate	471-34-1	40% - 50%	10 mg/m ³	5 mg/m ³	
Bisphenol A / Epichlorohydrin Resin	25068-38-6	30% - 40%			
Iron Powder	65997-19-5	10% - 20%	10 mg/m	15 mppcf	
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	1% - 5%	Not Established	Not Established	

3. Hazard Identification

Eye Contact

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

Skin Contact

Contact with skin can cause irritation (minor itching, burning and/or redness) or dermatitis. Product may be readily absorbed through the skin, causing defatting.

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.

Primary Routes of Entry

Eye contact, skin contact, inhalation

4. First Aid Information**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.

5. Fire Fighting Measures

Flash Point	>200F 93C
FP Method	Seta Flash Closed Cu

Lower Flammable Limits (%)

Not established

Upper Flammable Limit (%)

Not established

Extinguishing Media

Carbon Dioxide, Dry Chemical, Foam

Special Fire Fighting Procedures

Fight like a fuel oil fire. Cool fire exposed containers with water spray. Fire fighter should wear OSHA/NIOSH approved self-contained breathing apparatus.

Unusual Fire or Explosion Hazards

Closed containers exposed to high temperatures, such as fire conditions, may rupture.

6. Accidental Release Measures

Steps to be taken in case of spill or release

Ventilate area. Remove all possible sources of ignition. Avoid prolonged breathing of vapor. Contain spill with inert absorbent.

Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

7. Handling and Storage

Handling

Use with adequate ventilation. Avoid contact with eyes and skin. Avoid breathing vapors. Do not flame, cut, braze weld or melt empty containers.

Storage

Do not store product above 100°F/38°C. Do not flame, cut, braze weld or melt empty containers. Keep the product away from heat, open flames, and other sources of ignition. Avoid contact with strong acids, alkalis and oxidizers.

8. Exposure Controls and Personal Protection

Component Exposure Limits

Calcium Carbonate (1317-65-3, 471-34-1)
ACGIH TWA 10 mg/m³
OSHA PEL 15 mppcf

Iron Powder (65997-19-5)
AGIH TLV: 15 mg/ m³
OSHA PEL 15 mppcf

Epoxy Resin (25068-38-6)
N/E

Aromatic Hydrocarbons (64742-94-5)
ACGIH TLV 100 ppm
OSHA PEL 100 ppm

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.

Explosion-proof ventilation may be necessary.

Skin Protection

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.

9. Physical and Chemical Properties

Physical State	Smooth paste
Specific Gravity	1.8
Color/Appearance	Dark gray or black
Boiling/Cond. Point	Not available
Solubility	Not soluble in water
Evaporation Rate	Slower than Ethyl Ether
VOC %	45 g/ 0.37 lbs/gal
Percent Volatile	Approx. 2.5% by wt
Vapor Density	Heavier than air
Vapor Pressure	Heavier than air

Note

The above information is not intended for use in preparing product specifications. Contact Accumetric LLC before writing specifications.

10. Stability and Reactivity

Chemical Stability

Stable

Conditions to Avoid

Open flames, sparks, heat, electrical and static discharge.

Materials to Avoid

Avoid contact or contamination with strong acids, alkalis or oxidizing agents.

Hazardous Decomposition Products

Carbon dioxide, Carbon monoxide and Carbon

Hazardous Polymerization

Will not occur

11. Toxicological Information

Chronic Effects

Overexposure to this material has apparently been known to cause the following effects in lab animals: Skin sensitization.

Carcinogenicity

This product is not known to be a carcinogen.

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

12. Ecological Information

Marine Pollutant

None

13. Disposal Considerations

We make no guarantee or warranty of any kind that the use or disposal of this product complies with all local, state, or federal laws. It is also the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

14. Transportation Information

For Ground Transport: In USA

Not regulated

For Air Transport

Not regulated

For Ocean Transport

Not regulated

15. Regulatory Information

California Proposition 65

This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm:

Trace amounts of Epichlorohydrin (106-89-8), 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.

16. Other Information

Disclaimer

The data contained herein is based upon information that Accumetric LLC believes to be reliable. Users of this product have the responsibility to determine that suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons

involved in said use. All statements or suggestions are made without warranty, expressed or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

MSDS Document

Product BOSS® 293 Steel Epoxy - Hardener (Part B)

1. Chemical Product and Company Identification

Product BOSS® 293 Steel Epoxy - Hardener (Part B)

MSDS ID BOSS293B

Manufacturer

Accumetric, LLC
350 Ring Road
Elizabethtown, KY 42701

Phone Number

(270) 769-3385

Emergency Phone

CHEMTREC (800) 424-9300
CHEMTREC International (703) 527-3887

Revision Date 4/15/2014

Health:	2
Fire:	1
Reactivity:	1
Stock	

2. Composition and Information on Ingredients

Ingredient	CAS Number	Weight %	ACGIH TLV	PEL	STEL
Calcium carbonate	1317-65-3	5% - 10%	10 mg/m3	5 mg/m3	
Calcium Carbonate	471-34-1	5% - 10%	10 mg/m3	5 mg/m3	
Magnesium silicate	14807-96-6	15% - 25%			
Barium Sulfate	7727-43-7	35% - 45%	10 mg/m3	5 mg/m3	
Nonyl Phenol (Mixed Isomers)	25154-52-3	1% - 5%	Not Established		
Mercaptan terminated polymer	Trade Secret	20% - 30%			
2,4,6-Tri(dimethylaminomethyl) phenol	90-72-2	1% - 5%			

Amorphous fumed silica 112945-52-5 1% - 5% 10 mg/m3 6 mg/m3

3. Hazard Identification

Eye Contact

Contact with eyes can cause severe irritation, possible irreparable eye damage.

Skin Contact

Contact with skin can cause irritation (minor itching, burning and/or redness) or dermatitis. Product may be readily absorbed through the skin, causing defatting.

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.

Primary Routes of Entry

Inhalation, skin contact

4. First Aid Information

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.

5. Fire Fighting Measures

Flash Point

>200F 93C

FP Method

Seta Flash Closed Cu

Lower Flammable Limits (%)

Not established

Upper Flammable Limit (%)

Not established

Extinguishing Media

Carbon Dioxide, Dry Chemical, Foam

Special Fire Fighting Procedures

Fight like a fuel oil fire. Cool fire exposed containers with water spray. Fire fighter should wear OSHA/NIOSH approved self-contained breathing apparatus.

Unusual Fire or Explosion Hazards

Closed containers exposed to high temperatures, such as fire conditions, may rupture.

6. Accidental Release Measures

Steps to be taken in case of spill or release

Ventilate area. Remove all possible sources of ignition. Avoid prolonged breathing of vapor. Contain spill with inert absorbent.

Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

7. Handling and Storage

Handling

Use with adequate ventilation. Avoid contact with eyes and skin. Avoid breathing vapors. Do not flame, cut, braze weld or melt empty containers.

Storage

Do not store product above 100°F/38°C. Do not flame, cut, braze weld or melt empty containers. Keep the product away from heat, open flames, and other sources of ignition. Avoid contact with strong acids, alkalis and oxidizers.

8. Exposure Controls and Personal Protection

Component Exposure Limits

Calcium Carbonate (1317-65-3, 471-34-1)

ACGIH TWA 10 mg/m³

OSHA PEL 15 mppcf

Non-fibrous Talc (14807-96-6)

ACGIH TWA 2 mg/m³

OSHA PEL 20 mppcf

Barium Sulfate (7727-43-7)

ACGIH TWA 10 mg/m³

OSHA 15 mg/m³ Total dust

OSHA 15 mg/m³ Respirable dust

Alkyl Phenol (25154-52-3)

N/E

Mercaptan terminated polymer (Trade Secret)
NE

2,4,6 [(Dimethylamino)methyl] phenol (90-72-2)
N/E

Amorphous Silica (112945-52-5)
ACGIH TWA 10 mg/m³ 5 mg/m³ (respirable)

Respiratory Protection

If component TLV levels 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.

Skin Protection

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.

9. Physical and Chemical Properties

Physical State	Paste
Specific Gravity	1.87
Color/Appearance	White
Boiling/Cond. Point	Not available
Solubility	Not soluble in water
Evaporation Rate	Slower than Ethyl Ether
VOC %	4 g/L 0.03 lbs/gal
Vapor Density	Heavier than air
Vapor Pressure	Heavier than air

Note

The above information is not intended for use in preparing product specifications. Contact Accumetric LLC before writing specifications.

10. Stability and Reactivity

Chemical Stability

Stable

Conditions to Avoid

Open flames, sparks, heat, electrical and static discharge.

Materials to Avoid

Avoid contact or contamination with strong acids, alkalis or oxidizing agents.

Hazardous Decomposition Products

Carbon dioxide, Carbon monoxide and Carbon

Hazardous Polymerization

Will not occur

11. Toxicological Information**Chronic Effects**

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

Carcinogen

There is no evidence that this product risk under normal conditions of handling and use.

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

12. Ecological Information**Marine Pollutant**

None

13. Disposal Considerations

We make no guarantee or warranty of any kind that the use or disposal of this product complies with all local, state, or federal laws. It is also the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

14. Transportation Information**For Ground Transport: In USA**

Not regulated

For Air Transport

Not regulated

For Ocean Transport

Not regulated

15. Regulatory Information**California Proposition 65**

This product contains the following chemical(s) listed by the State of California under the Safe

Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm:

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.

16. Other Information

Disclaimer

The data contained herein is based upon information that Accumetric LLC believes to be reliable. Users of this product have the responsibility to determine that suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. All statements or suggestions are made without warranty, expressed or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.