



SAFETY DATA SHEET

1. Identification

GHS product identifier	STEEL-IT LVOC Epoxy Primer, Part "B"
Product code	4220B
Version #	01
Issue date	11-12-2012
Revision date	-
Supersedes date	-
CAS #	Mixture
Recommended use	Paint / Industrial coating.
Recommended Restrictions	Not available.
Manufacturer information	Stainless Steel Coatings, Inc 835 Sterling Road South Lancaster, MA, 01561 Contact person: CHEMTREC sds@steel-it.com (978) 365-9828

2. Hazards identification

GHS classification

Physical hazards	Flammable liquids	Category 3
Health hazards	Acute toxicity, oral	Category 5
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2
	Carcinogenicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 2 (Lung)
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 3

GHS label elements

Signal word Warning



Hazard statement Flammable liquid and vapor. May be harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. May cause damage to organs (Lung) through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.
Response	In case of fire: Use alcohol-resistant foam, carbon dioxide, dry powder or water fog for extinction. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.
Storage	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Specific hazards

Vapors irritate the respiratory system, and may cause coughing and difficulties in breathing. Organic solvents may be absorbed into the body by inhalation and ingestion and cause permanent damage to the nervous system, including the brain. Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

3. Composition/information on ingredients

Components	CAS #	Percent
Barium sulphate	7727-43-7	25 - 30
Talc	14807-96-6	10 - 15
1,2,4-Trimethylbenzene	95-63-6	5 - 10
Benzyl alcohol	100-51-6	5 - 10
Solvent naphtha (petroleum), light aromatic	64742-95-6	5 - 10
Titanium dioxide	13463-67-7	5 - 10
2,4,6-Tris-(dimethylaminomethyl)- phenol	90-72-2	1 - 5
4-hydroxy-4-methylpentan-2-one	123-42-2	1 - 5
1,3,5-Trimethylbenzene	108-67-8	1 - 3
Dimethyl silicone polymer with silica	67762-90-7	1 - 3
Diethylbenzene	25340-17-4	<1

Composition comments

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First aid measures**First aid procedures****Inhalation**

Move injured person into fresh air and keep person calm under observation. Get medical attention if any discomfort occurs.

Skin

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation develops and persists.

Eye

Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids wide apart. Get medical attention if irritation or symptoms persist.

Ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention if any discomfort occurs.

Most important symptoms and effects, both acute and delayed

Vapors may cause drowsiness and dizziness. Causes skin irritation. Causes eye irritation.

Notes to physician

Treat symptomatically.

General advice

Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

5. Fire-fighting measures**Suitable extinguishing media**

Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed. Solvent vapors may form explosive mixtures with air.

Protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Protection of fire-fighters

Use standard firefighting procedures and consider the hazards of other involved materials. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

6. Accidental release measures**Personal precautions**

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid inhalation of vapors and spray mist and contact with skin and eyes.

Environmental precautions

Do not allow to enter drains, sewers or watercourses.

Methods for containment

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Remove sources of ignition. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

7. Handling and storage

Handling

Local exhaust is recommended. Avoid inhalation of vapors and spray mist and contact with skin and eyes. The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures. Do not smoke, use open fire or other sources of ignition. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Use non-sparking hand tools and explosion-proof electrical equipment. Observe good industrial hygiene practices.

Storage

Store in closed original container in a dry place. Keep away from heat, sparks and open flame. Protect against direct sunlight. Store away from incompatible materials.

8. Exposure controls / personal protection

Control parameters

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
1,2,4-Trimethylbenzene (CAS 95-63-6)	TWA	25 ppm	
1,3,5-Trimethylbenzene (CAS 108-67-8)	TWA	25 ppm	
4-hydroxy-4-methylpentan- 2-one (CAS 123-42-2)	TWA	50 ppm	
Barium sulphate (CAS 7727-43-7)	TWA	10 mg/m3	
Talc (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Recommended monitoring procedures

Follow standard monitoring procedures.

Engineering controls

Use explosion-proof equipment. Provide adequate ventilation and minimize the risk of inhalation of vapors and mists. Explosion-proof general and local exhaust ventilation. Provide easy access to water supply or an emergency shower.

Personal protective equipment

Eye/face protection

Chemical goggles are recommended.

Skin protection

Wear suitable protective clothing. Chemical/oil resistant clothing is recommended.

Respiratory protection

In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

Hand protection

Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

9. Physical and chemical properties

Appearance

Physical state

Liquid.

Color

White.

Form

Liquid.

Odor

Characteristic of solvents.

Odor threshold

Not available.

pH

Not available.

Melting point/Freezing point

Not available.

Boiling point

318 - 401 °F (158.9 - 205 °C)

Flash point

108 °F (42.2 °C) Closed Cup

Evaporation rate

Slower than ether.

Flammability (solid, gas)

Not applicable.

Flammability limits in air, lower, % by volume

1.8 %

Flammability limits in air, upper, % by volume

Not available.

Vapor pressure

Not available.

Vapor density

> 1 (air=1)

Relative density

1.49 (77°F)

Solubility (H2O)

< 2 g/100 g

Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC (Weight %)	248 g/l
Molecular weight	Not available.
Other data	
Explosive limit	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.

10. Stability and reactivity

Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Will not occur.
Conditions to avoid	Heat, sparks, flames. Incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong reducing agents. Strong acids.
Hazardous decomposition products	Carbon oxides. Nitrogen compounds.

11. Toxicological information

Toxicological data

Components	Species	Test Results
1,2,4-Trimethylbenzene (CAS 95-63-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 3160 mg/kg
<i>Inhalation</i>		
LC50	Rat	18000 mg/m3, 4 hours
1,3,5-Trimethylbenzene (CAS 108-67-8)		
Acute		
<i>Oral</i>		
LD50	Rat	8970 mg/kg
4-hydroxy-4-methylpentan-2-one (CAS 123-42-2)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	14.5 ml/kg
<i>Oral</i>		
LD50	Rat	4 g/kg
Benzyl alcohol (CAS 100-51-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	1000 mg/l, 8 Hours
<i>Oral</i>		
LD50	Rat	1230 - 3100 mg/kg

Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.
Toxicological information	Occupational exposure to the substance or mixture may cause adverse effects.
Acute toxicity	May be harmful if swallowed.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory sensitizer	No data available.
Skin sensitization	Not a skin sensitizer.
Mutagenicity	No data available.
Carcinogenicity	Suspected of causing cancer.

ACGIH Carcinogens

Barium sulphate (CAS 7727-43-7)

A4 Not classifiable as a human carcinogen.

Talc (CAS 14807-96-6)

Titanium dioxide (CAS 13463-67-7)

A4 Not classifiable as a human carcinogen.

A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Titanium dioxide (CAS 13463-67-7)

2B Possibly carcinogenic to humans.

Reproductive toxicity	No data available.
Specific target organ toxicity - single exposure	No data available.
Specific target organ toxicity - repeated exposure	May cause damage to organs (Lung) through prolonged or repeated exposure.
Aspiration hazard	No data available.
Symptoms	Vapors may cause drowsiness and dizziness. Skin and eye irritation.
Other information	Organic solvents may be absorbed into the body by inhalation and cause permanent damage to the nervous system, including the brain.

12. Ecological information

Ecotoxicological data

Components	Species	Test Results
1,2,4-Trimethylbenzene (CAS 95-63-6)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 7.19 - 8.28 mg/l, 96 hours
1,3,5-Trimethylbenzene (CAS 108-67-8)		
Aquatic		
Fish	LC50	Goldfish (<i>Carassius auratus</i>) 9.89 - 15.05 mg/l, 96 hours
4-hydroxy-4-methylpentan-2-one (CAS 123-42-2)		
Aquatic		
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) 420 mg/l, 96 hours
Barium sulphate (CAS 7727-43-7)		
Aquatic		
Crustacea	EC50	Tubificid worm (<i>Tubifex tubifex</i>) 28.61 - 38.03 mg/l, 48 hours
Benzyl alcohol (CAS 100-51-6)		
Aquatic		
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) 10 mg/l, 96 hours
Ecotoxicity	Harmful to aquatic life with long lasting effects.	
Persistence / degradability	No data available.	
Bioaccumulation		
Bioaccumulative potential		
Octanol/water partition coefficient log Kow		
4-hydroxy-4-methylpentan-2-one		-0.098
Benzyl alcohol		1.1
Mobility	The product contains organic solvents which will evaporate easily from all surfaces.	
Other adverse effects	No data available.	

13. Disposal considerations

Disposal methods	Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

14. Transport information

ADR

UN number	UN1263
Proper shipping name	Paint
Hazard class	3
Packing group	III
Environmental hazards	
Marine pollutant	No
Tunnel restriction code	(D/E)

Labels required	3
Special precautions	Read safety instructions, SDS and emergency procedures before handling.
IATA	
UN number	UN1263
Proper shipping name	Paint
Hazard class	3
Packing group	III
Labels required	3
Special precautions	Read safety instructions, MSDS and emergency procedures before handling.
IMDG	
UN number	UN1263
Proper shipping name	Paint
Hazard class	3
Packing group	III
Environmental hazards	
Marine pollutant	No
Labels required	3
EmS	F-E, S-E
Special precautions	Read safety instructions, MSDS and emergency procedures before handling.
RID	
UN number	UN1263
Proper shipping name	Paint
Hazard class	3
Packing group	III
Environmental hazards	
Marine pollutant	No
Labels required	3
Special precautions	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available.

15. Regulatory information

Regulatory information This material safety data sheet was prepared in accordance with "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)".

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. Other information

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.

List of abbreviations Not available.