



SHIELD 50 EPOXY RESURFACER

MATERIAL SAFETY DATA SHEET

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Effective: August 01, 2004

SECTION 1 - PRODUCT IDENTIFICATION

Common Name: SHIELD 50
(As appears on label)
Chemical Family: Aliphatic Amines
Manufacturer/Supplier: Concrete Coatings Inc
PO Box 150071
Ogden, UT 84415
1-800-443-2871

Prepared by: Troy Harris, Technical Director

Emergency: Chemtrec 1-800-424-9300

Hazard Rating		Scale
Toxicity	2	4 = Extreme
Flammability	2	3 = High
Reactivity	2	2 = Moderate
Special	0	1 = Slight
		0 = Insignificant

SECTION 2 - HAZARDOUS INGREDIENTS

Hazardous Component(s) (Chemical & common Name(s))	CAS No.	OSHA		LD 50 Oral	LC 50 Inhalation
		TWA	PEL		
Component A					
Bisphenol A Epoxy Resin	25068-36-6	N.E.	N.E.	11.4 g/kg (Rats)	No Deaths (2)
Butyl Glycidyl Ether	2426-08-6	25 ppm	N.E.	2.26 g/kg (Rats)	1030 ppm (Rats)
Component B					
Triethylenetetramine >35%	112-24-3	N.E.	N.E.	N.E.	N.E.
Benzyl Alcohol >12%	100-51-6	N/A	N/A	N/A	N/A
This product is an epoxy resin produced by the condensation reaction of Epichlorohydrin and Bisphenol-A. These raw materials are consumed in the process. Residual levels of Epichlorohydrin are controlled to 1 ppm max. in the process					

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point:	<u>A</u> N/A	<u>B</u> >275°C (>527°F)
Specific Gravity (Water = 1):	1.07	.99
Vapor Pressure (mm Hg):	N/A	<0.01 (mm/hg at 21°C/ 70°F)
Vapor Density (Air = 1):	N/A	4.8
Solubility in Water:	Negligible	100% Completely
Melting Point:	N/A	N/A
Appearance & Odor	Clear to amber liquid, with slight aromatic and irritating odor.	Amber to dark color liquid, with mild ammoniacal odor

SECTION 4 - FIRE AND EXPLOSION DATA

Flash Point:	A 166°F (74°C) Seta Flash-Closed Cup	B >275°C (244°F)
Flammable Limits:	LEL: N/A UEL: N/A	LEL: N/A UEL: N/A
Extinguishing Media:	Water fog, foam, dry chemical or Co2.	
Special Fire Fighting Procedures:	Material will not burn unless preheated. Firefighters should wear full bunker gear which should include Butyl Rubber boots, gloves, helmet with face shield, body suit and a self-contained breathing apparatus. Cool exposed containers with H2O	
Unusual Fire/Explosion Hazards:	SEE SECTION 5	

SECTION 5 – REACTIVITY DATA

Stability:	Stable
Conditions to avoid:	A Strong acids, strong Lewis acids or mineral acids, and strong mineral and organic bases-especially primary and secondary aliphatic amines. Reaction with some curing agents may produce considerable heat. Run-a-way cure reactions may char and decompose the resin system, generating unidentified fumes and vapors which may be toxic B Generating unidentified fumes and vapors which may be toxic and irritating combustion products. Sudden reaction and fire may result if product mixed with an oxidizing agent.
Hazardous decomposition products:	A Carbon monoxide, Aldehydes, Acids, and other organic substances may be formed during combustion or elevated (5000°F/260°C) with temperature degradation. B Carbon monoxide gas, toxic nitrogen oxide gases, and ammonia gas may be generated.
Hazardous polymerization:	Will not occur.

SECTION 6 HEALTH HAZARD DATA

Carcinogenicity:	NO
IARC:	NO
OSHA Regulated?:	NO
Threshold Limit Value (TLV):	5 ppm
Effects of Overexposure:	

Inhalation:	Inhalation of mist or vapor can cause irritation of upper respiratory tract.
Skin Contact:	Direct or repeated skin contact can cause slight skin irritation, flaking, and softening of skin.
Eye Contact:	Direct contact to eyes can cause irritation, tearing, swelling, and possible burning sensation

Emergency and First Aid Procedures

Eyes:	Flush eyes with water for 15 minutes. Consult physician if irritation persists.
Skin:	Wash area thoroughly with soap and water
Inhalation:	Move victim to fresh air.
Ingestion:	A Do not induce vomiting. Call physician immediately



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NOTE TO PHYSICIAN: **B** Call physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel.
In general, emesis induction is unnecessary in high viscosity, low volatility products, e.g...neat epoxy resins.

SECTION 7 – SPILL OR LEAK PROCEDURES

If Material Spills or Leaks: Absorb material with inert media and dispose of in a chemical-waste container. Keep away from Municipal sewers, lakes, or streams.

Waste Disposal: Container is considered empty when 3% or less remains. Additional special handling is not required. Container may be discarded other non-hazardous trash. Dispose of in accordance with local, state and federal regulations.

SECTION 8 – SAFE HANDLING AND STORAGE INFORMATION

Respiratory Protection None required under normal conditions. When mist occurs during spraying operations, wear an approved disposable half mask dust/mist respirator.

Protective Equipment: Impervious gloves, neoprene or rubber; safety glasses with splash guards or side shields, chemical goggles, or face shields.

Other Equipment and Practices: Standard painting clothing is suitable.

Special Precautions for Handling and Storage: Store in a cool, dry place. Keep from freezing, material may coagulate.

SECTION 9 – SHIPPING INFORMATION

DOT Shipping Name: Epoxy Resin
DOT Hazard Class: 1
DOT Reportable Quantity: N/A

USERS RESPONSIBILITY & DISCLAIMER OF LIABILITY: A bulletin such as this cannot be expected to cover all possible situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where precautions – in addition to those described herein are required. Although the information contained herein is based on data considered to be accurate, all materials present unknown health hazards, and should be used with caution and by properly trained personnel. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Any health hazard and safety information should be passed onto your customers or employees, as the case may be. Final suitability of the chemical for each circumstance is the sole responsibility of the end user. No representation or warranties either expressed or implied, of merchantability, fitness for a particular purpose, or any other nature are made hereunder with respect to the information contained herein, or the chemical to which the information refers. It is the sole responsibility of the end user to comply with all applicable federal, state and local laws and regulations. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed.