

MATERIAL SAFETY DATA SHEET

WHMIS HAZARD: D2A, D2B, E

SECTION 1 – PRODUCT IDENTIFICATION AND USE

Product Identifier **SP-3888® HARDENER**

Product Use **850-252**

Product Use Curing Agent for SP-3888® Brush Grade and Spray Grade Base Grey.

Manufacturer's Name **SPECIALTY POLYMER COATINGS, INC.**

Street Address #101 – 20529 – 62nd Avenue City/Province: Langley, BC

Postal Code V3A 8R4

Emergency Telephone Number..... CANUTEC: (613) 996-6666

INFORMATION NUMBER..... (604) 514-9711

Supplier's Name..... **SPECIALTY POLYMER COATINGS, INC.**

Street Address #101 – 20529 – 62nd Avenue City/Province: Langley, BC

Postal Code V3A 8R4

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SECTION 2 – HAZARDOUS INGREDIENTS

<u>Hazardous Ingredients</u>	<u>%</u>	<u>C.A.S. #</u>	<u>Lethal Dose 50% Species & route</u>	<u>Lethal Conc 50% Species & route</u>	<u>TLV TWA-ACGIH</u>
1,2 Diaminocyclo Hexane	10-30	694-83-7	N/AV	N/AV	N/AV
Benzyl Alcohol	10-30	100-51-6	1230 mg/kg Rat Oral 2000 mg/kg Rabbit Dermal	N/AV	N/AV
Salicylic Acid	0.1-0.9	69-72-7	891 mg/kg Rat Oral 480 mg/kg Mouse Oral >10,000 mg/kg Rabbit Dermal	>900 mg/m ³ /1H Rat Inhalation	N/AV
Aminoethylpiperazine	10-30	140-31-8	2140 mg/kg Rat Oral 880 mg/kg Rabbit Dermal	N/AV	N/AV
Nonylphenol	5-10	25154-52-3	1231 mg/kg Mouse Oral 2140 mg/kg Rabbit Dermal	N/AV	N/AV
Bisphenol A	10-30	80-05-7	2230 mg/kg Rat Oral 3000 mg/kg Rabbit Dermal	N/AV	N/AV
Benzyl dimethylamine	1-5	103-83-3	265 mg/kg Rat Oral 1660 mg/kg Rabbit Dermal	1800 mg/M ³ /2H/Mouse	N/AV
Diethylene Triamine	1-5	111-40-0	1080 mg/kg Rat Oral 1090 mg/kg Rabbit Dermal	N/AV	1 ppm Skin
Cycloaliphatic-Aromatic Polyamine Registry #4268	1-5	Trade Secret	N/AV	N/AV	N/AV

SECTION 2 – HAZARDOUS INGREDIENTS (cont.)

<u>Hazardous Ingredients</u>	<u>%</u>	<u>C.A.S. #</u>	<u>Lethal Dose 50% Species & route</u>	<u>Lethal Conc 50% Species & route</u>	<u>TLV TWA-ACGIH</u>
Hexamethylenediamine	0.1-1.0	124-09-4	750 mg/kg Rat Oral 1110 mg/kg Rabbit Dermal	N/AV	0.5 ppm
Polyethylenepolyamines	3-7	29320-38-5	1500 mg/kg Rat Oral	N/AV	N/AV
Tetraethylenepentamine	0.1-1.0	112-57-2	1500 mg/kg Rat Oral	N/AV	N/AV

CEPA STATUS: All of the ingredients of this product are on the DSL.

TSCA STATUS: All of the ingredients of this product are on the TSCA Inventory.

SECTION 3 – PHYSICAL DATA

Physical State	Liquid.
Odour and Appearance.....	Amber, viscous liquid.
Odour Threshold (ppm)	N/AV
Vapour Pressure (mm/Hg)	<1.00 @ 20°C (68°F)
Vapour Density (air=1)	N/AV
Evaporation Rate (butyl acetate=1)	N/AV
Boiling Point	N/AV
Freezing Point	N/AV
pH.....	Alkaline.
Specific Gravity (water=1).....	1.06 @ 25°C (77°F)
Coefficient of water/oil distribution.....	N/AV
Solubility in water (20°C / 68°F).....	Slight.

SECTION 4 – FIRE AND EXPLOSION

Flammability	Not flammable as per WHMIS.
Flammability: If Yes, under which conditions?....	Excessive heat, sparks and open flame. Surrounding fire.
Means of extinction.....	Dry chemical, foam, Carbon Dioxide, water spray.
Special Procedures	Firefighters should wear the usual protective gear. Use Self-Contained Breathing Apparatus.
Flash Point and Method	>93.3°C (>199.94°F) PMCC.
Upper Flammability Limit (% by volume)	N/AV
Lower Flammability Limit (% by volume).....	N/AV
Autoignition Temperature.....	N/AP
Hazardous Combustion Products	Oxides of Carbon, Oxides of Nitrogen, Carboxylic acids, Aldehydes.
Explosion Data:	
Sensitivity to impact.....	Protect against physical damage.
Sensitivity to Static Discharge	Take precautionary measures against static discharge.

SECTION 5 – REACTIVITY DATA

Chemical Stability	Yes. Product is stable in non-emergency conditions.
Incompatibility with other substances.....	Yes. Oxidizing agents (perchlorates, nitrates), acids.
Reactivity and under what conditions.....	Contact with incompatible substances.
Hazardous Decomposition Products	Refer to Section 4 – Hazardous Combustion Products.

SECTION 6 – TOXICOLOGICAL PROPERTIES

Route of Entry	Skin, eyes, inhalation, ingestion.
Effects of Acute Exposure:	
Skin Contact.....	May cause allergic skin reaction, corrosive to skin, causes burns, severe irritation.
Skin Absorption	May be absorbed by the skin.
Eye Contact	Corrosive to the eyes.
Inhalation	May affect central nervous system. Vapours may cause respiratory tract irritation.
Ingestion.....	Harmful if swallowed. Headaches, nausea, vomiting. May cause bleeding of the gastrointestinal tract. Ingestion of salicylic acid may cause increased breathing rate, metabolic disturbances, ringing in ears, and diminished vision.
Effects of Chronic Exposure to Product	Repeated or prolonged contact with skin may cause allergic reaction or sensitization, adverse skin effects, adverse respiratory effects. Potential sensitizer.
Exposure Limits	Refer to Section 2 – Hazardous Ingredients.
Irritancy of Product	Refer to Effects of Acute Exposure.
Carcinogenic Effects	None known.
Teratogenicity	Negative.
Reproductive Effects.....	N/AV
Mutagenicity	Negative.
Synergistic Products.....	N/AV

SECTION 7 – PREVENTATIVE MEASURES

Personal Protective Equipment:

- Gloves Chemical resistant gloves with a long cuff with a long cuff that will overlap the clothing sleeves should be worn when handling this product. The glove / clothing overlaps should be sealed by tape. Check with the glove manufacturer to determine the proper glove type.
- Respirator Wear an appropriate, properly fitted vapour respirator (NIOSH / OSHA approved) during application where vapour / mist are likely to be encountered, e.g. confined spaces and during winter construction or when the substrate is preheated. For outdoor application and areas with adequate ventilation, the use of a respirator is normally not required. Follow the respirator manufacturer's recommendations. A dust respirator should be worn for any activity such as sanding or grinding of cured coating.
- Eyes Wear splash proof chemical safety goggles and / or face shield.
- Footwear..... Wear impervious boots.
- Clothing..... Long-sleeved clothing is to be worn over regular clothing to cover all exposed areas of arms, legs or torso during mixing and application of the coating. Breathable clothing, such as cotton or disposable coveralls, is recommended.
- Other..... Emergency eyewash and a shower should be in close proximity, where possible. A barrier cream may be used, in conjunction with the stated protective measures, as an additional safeguard against skin contact.
- Engineering Controls ... Mechanical ventilation, both dilution and exhaust may be utilized to keep exposure below the TLV. Extra ventilation should be provided in enclosed spaces.
- Leak and Spill Procedure Remove all sources of ignition. Wear appropriate safety equipment as listed above. Soak up spills with inert absorbent materials and place in closed containers. Prevent run-off from reaching storm or sewer drains.
- Waste Disposal..... Dispose of according to Federal, Provincial, and Municipal regulations in Canada and Federal, State, and County regulations in the United States of America.
- Handling Procedures and Equipment..... All equipment must be grounded. Keep container closed when not in use. Wear appropriate personal protective equipment. Maintain good personal hygiene, wash thoroughly after using, particularly before eating or going on breaks.
- Storage Requirements Store in a cool, dry, well-ventilated area away from incompatible materials and all sources of ignition. Keep in a tightly sealed container.

SECTION 8 – SHIPPING INFORMATION

PIN: UN2735
Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.
(Cycloaliphatic Polyamines)
Class: 8
Pkg.Grp.: III
Mode: Ground (TDG) or Air (IATA) or Ocean (IMDG)

SECTION 9 – FIRST AID MEASURES

Specific Measures:

Inhalation Remove to fresh air. If breathing has stopped, a trained person should perform artificial respiration. Get Medical attention.
Ingestion..... Get Medical attention **IMMEDIATELY**.
Eye Contact..... Flush with water for at least 15 minutes, hold eyelids apart to ensure complete irrigation of all eye and lid tissue, and get Medical attention.
Skin Contact.... Wash with water and mild soap for at least 15 minutes. Remove contaminated clothing and wash before re-use. Get Medical attention.

CAUTION---NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

SECTION 10 – PREPARATION DATE OF MSDS

Prepared by Technical Department of Specialty Polymer Coatings, Inc. with information provided by suppliers of raw materials used in the manufacture of SP-3888® Hardener.
Phone Number..... (604) 514-9711
Preparation Date.... July 17, 1998
Revision Date..... March 27, 2009

NOTE: While Specialty Polymer Coatings, Inc. believes that the data contained herein are accurate and derived from qualified sources, the data are not to be taken as a warranty or representation for which Specialty Polymer Coatings, Inc. assumes legal responsibility. The data is offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable Federal, Provincial / State, and Municipal / County laws and regulations.

ABBREVIATIONS USED IN PREPARING THIS MSDS

% - Percent	# - Number	< - Less Than	> - Greater Than	@ - At
ACGIH.....				American Conference of Governmental Industrial Hygienists
C.....				Centigrade
C.A.S. #				Chemical Abstract Number
CEIL				Ceiling Limit
CEPA				Canadian Environmental Protection Agency
CFR.....				Code of Federal Regulations
DOT				Department of Transportation
DSL.....				Domestic Substance List
Derm-LD50.....				Dermal Lethal Dose - 50% Death
F.....				Fahrenheit
FP.....				Flash Point
g/kg				Grams/kilogram
HMIS				Hazardous Material Information System
IARC.....				International Agency for Research on Cancer
IATA.....				International Air Transportation Authority
IMDG.....				International Marine Dangerous Good
Inhal-LC50.....				Inhalation Lethal Concentration - 50% Death
Kg				Kilogram
Lb/gal.....				Pounds per Gallon
LEL.....				Lower Explosion Limit
Lethal Conc.....				Lethal Concentration (50% Death)
Lethal Dose.....				Lethal Dosage (50% Death)
ml/kg.....				Millilitres/kilogram
mg/L.....				Milligrams per Litre
mg/M3.....				Milligrams per Meter Cubed
mm/Hg				Millimeters of Mercury
N/AP.....				Not Applicable
N/AV				Not Available
N/D				Not Determined
NFPA HAZARD RATING				4 - Extreme, 3 - High, 2 - Moderate, 1 - Slight, 0 - None, X - Blank
NIOSH.....				National Institute of Occupational Safety & Health
NTP.....				National Toxicology Program
Oral-LD50				Oral Lethal Dose-50% Death
OSHA				Occupational Safety and Health Administration
PEL				Permissible Exposure Limit
PIN.....				Product Identification Number
Pkg.Grp.....				Packing Group
PMCC				Pensky-Martens Closed Cup
ppm				Parts per million
SARA.....				Superfund Amendments & Reauthorization Act (1986)
SETA				Setaflash Closed Tester
STEL.....				Short Term Exposure Limit
TDG.....				Transportation of Dangerous Goods Act and Pursuant Regulations
TLV				Threshold Limit Value
TWA				Time Weighted Average
TSCA.....				Toxic Substances Control Act
WHMIS				Workplace Hazardous Material Information System