

MATERIAL SAFETY DATA SHEET

SPC 50000

SECTION 1 -PRODUCT AND COMPANY IDENTIFICATION

Product Identifier:

Trade Name **SP-2888® R.G. MINI CARTRIDGE HARDENER BLUE**
Product Code **850-297**
WHMIS Classification **D2A, D2B, E**
Product Use Curing agent for SP-2888® R.G. Mini Cartridge Base White
Manufacturer's Name..... **SPECIALTY POLYMER COATINGS, INC.**
Street Address 148 Mohawk Street, Unit G City, Province/State: Brantford, ON
Postal/Zip Code..... N3S 7G5
Country..... CANADA
Supplier's Name..... **SPECIALTY POLYMER COATINGS USA, INC.**
Street Address 22503 FM 521 RD City, Province/State: Angleton, TX
Postal/Zip Code..... 77515
Country..... USA
Phone Number..... 281-595-3530
Emergency Telephone Number: In Canada, call CANUTEC: 1-613-996-6666
In USA, call CHEMTREC: 1-800-424-9300
MSDS Preparation Date.... April 15, 2014
MSDS Revision Date April 15, 2014
MSDS Prepared by.... Technical Department of Specialty Polymer Coatings, Inc. with
information provided by suppliers of raw materials used in the
manufacture of SP-2888® R.G. Mini Cartridge Hardener Blue.
Phone Number..... 604-514-9711

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients	%	CAS #	LD₅₀	LC₅₀
1,2-Diaminocyclohexane	1-10	694-83-7	N/AV	N/AV
Aminoethylpiperazine	5-15	140-31-8	2140 mg/kg Rat Oral 880 mg/kg Rabbit Dermal	N/AV
Bisphenol A	5-15	80-05-7	2230 mg/kg Rat Oral 3000 mg/kg Rabbit Dermal	N/AV
Feldspar	20-50	68476-25-5	N/AV	N/AV
Crystalline Silica (Quartz)	1-5	14808-60-7	N/AV	N/AV
Benzyl dimethylamine	1-5	108-83-3	265 mg/kg Rat Oral 1660 mg/kg Rabbit Dermal	1800 mg/M3/2H/Mouse
Benzyl Alcohol	5-15	100-51-6	1230 mg/kg Rat Oral 2000 mg/kg Rabbit Dermal	N/AV
Diethylene Triamine	1-5	111-40-0	1080 mg/kg Rat Oral 1090 mg/kg Rabbit Dermal	N/AV
Benzene-1,3-Dimethaneamine	1-5	1477-55-0	930 mg/kg Rat Oral 2000 mg/kg Rabbit Dermal	700 ppm/1H/Rat
Paratertiarybutylphenol	1-5	98-54-4	3250 mg/kg Rat Oral 2520 mg/kg Rabbit Dermal	N/AV

SECTION 3 – HAZARDS IDENTIFICATION

Route of Entry:

- Skin Contact..... Causes chemical burns. Severe irritant. May cause an allergic skin reaction.
- Skin Absorption Product is absorbed through skin. May cause nausea, headache, and general discomfort.
- Eye Contact..... Severe irritant. Burns of eyes may cause blindness. Corrosive to the eyes.
- Inhalation..... May cause nose and throat irritation. May cause lung injury and / or burns.
- Ingestion..... Harmful if swallowed. May cause death unless treated promptly.

SECTION 4 – FIRST AID MEASURES

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

**CAUTION---NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.
---GET IMMEDIATE MEDICAL ATTENTION FOR ANY SIGNIFICANT
OVEREXPOSURE.**

SECTION 5 – FIRE FIGHTING MEASURES

Flammable: No.

If yes, under which conditions?.... N/AV.

Means of Extinction Water spray or alcohol foam. In case of small fire, use carbon dioxide (CO₂), dry chemical, dry sand or limestone.

Flash Point and Method >93.3°C (>199.94°F) PMCC.

Upper Flammable Limit (% by volume)..... N/AV.

Lower Flammable Limit (% by volume) N/AV.

Autoignition Temperature..... N/AV.

Explosion Data - Sensitivity to Impact Protect against physical damage.

Explosion Data - Sensitivity to Static Discharge Not expected, but precautionary measures against static discharge should be observed.

Hazardous Combustion Products May generate toxic or irritating or flammable combustion products, oxides of nitrogen, oxides of carbon (CO, CO₂).

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedures..... Remove all sources of ignition (flames, sparks, etc.). Wear appropriate safety equipment. Provide adequate ventilation. Soak up spills with inert absorbent materials and place in closed containers. Prevent run-off from reaching storm or sewer drains.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures and Equipment..... All equipment must be grounded. Avoid inhalation, skin and eye contact. Wear appropriate Personal Protective Equipment as listed in Section 8. Maintain good personal hygiene and wash thoroughly after using, particularly before eating or going on breaks.

Storage Requirements Store in a cool, dry, well-ventilated area. The acceptable shipping and storage temperature range is between 5°C (41°F) and 40°C (104°F). Store away from incompatible materials and all sources of ignition. Keep in a tightly sealed container when not in use.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits:

Hazardous Ingredients	CAS #	ACGIH TLV (TWA)
1,2-Diaminocyclohexane	694-83-7	N/AV
Aminoethylpiperazine	140-31-8	N/AV
Bisphenol A	80-05-7	N/AV
Feldspar	68476-25-5	10 mg/M3 Total Dust
Crystalline Silica (Quartz)	14808-60-7	0.05 mg/M3 Respirable Dust
Benzyl dimethylamine	108-83-3	N/AV
Benzyl Alcohol	100-51-6	N/AV
Diethylene Triamine	111-40-0	1 ppm Skin
Benzene-1,3-Dimethaneamine	1477-55-0	0.1 mg/M3 Cel
Paratertiarybutylphenol	98-54-4	N/AV

Specific Engineering Controls: Provide general dilution or local exhaust in volume and pattern to keep the TLV of Hazardous Ingredients in Section 8 below acceptable limits. Extra ventilation should be provided in enclosed spaces.

Personal Protective Equipment:

- Gloves:** Chemical resistant gloves 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. Wear a dust respirator 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 personal protective equipment as an additional safeguard against skin contact.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid.
Odour and Appearance.....	Ammoniacal, blue liquid.
Odour Threshold (ppm).....	N/AV.
Specific Gravity (water=1).....	1.44 @ 25°C (77°F).
Vapour Density (air=1)	N/AV.
Vapour Pressure (mmHg)	N/AV.
Evaporation Rate (butyl acetate=1).....	N/AV.
Boiling Point	>107°C (>225°F).
Freezing Point	N/AV.
pH.....	N/AV.
Coefficient of Water/Oil Distribution	N/AV.
Solubility in Water [20°C (68°F)].....	Slight (0.1-1%)

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability.....	Yes.
If no, under which conditions?.....	N/AP.
Incompatibility With Other Substances	Yes.
If yes, under which conditions?	Strong acids, oxidizing agents (perchlorates, nitrates), sodium or calcium hypochlorite.
Reactivity, and under what conditions	Product slowly corrodes copper, aluminum, zinc, and galvanized surfaces. Contact with incompatible substances. Excessive heat.
Hazardous Decomposition Products	May generate toxic, irritating or flammable combustion products, oxides of nitrogen, oxides of carbon (CO, CO ₂).

SECTION 11 – TOXICOLOGICAL INFORMATION

Effects of Acute Exposure:

- Skin Contact..... Causes chemical burns. Severe irritant. May cause an allergic skin reaction.
- Eye Contact..... Severe irritant. Burns of eyes may cause blindness. Corrosive to the eyes.
- Inhalation..... May cause nose and throat irritation. May cause lung injury and / or burns.
- Ingestion..... Harmful if swallowed. May cause death unless treated promptly.

Effects of Chronic Exposure May cause lung damage, skin sensitization, dermatitis and respiratory sensitization. Excessive inhalation of respirable crystalline silica dust may cause lung disease, silicosis, with symptoms of cough, shortness of breath, and reduced pulmonary function. After installation and drying, activities such as grinding or sanding of material may cause dust concentration to be above the TLV limit for crystalline quartz.

Irritancy of Product Severe skin and eye irritant. May cause nose and throat irritation.

Skin Sensitization..... Refer to Effects of Chronic Exposure.

Respiratory Sensitization Refer to Effects of Chronic Exposure.

Carcinogenicity – IARC..... IARC has determined that crystalline silica is carcinogenic to humans (Group 1) if it is inhaled in the form of quartz or cristobalite (respirable dust) from occupational sources.

Carcinogenicity – ACGIH..... ACGIH classifies crystalline silica, quartz (respirable dust) as a suspected human carcinogen (A2).

Reproductive Toxicity..... None known.

Teratogenicity None known.

Embryotoxicity..... N/AV.

Mutagenicity None known.

Name of Synergistic Products/Effects ... None known.

SECTION 12 – ECOLOGICAL INFORMATION

No Data is available.

SECTION 13 – DISPOSAL CONSIDERATIONS

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.

SECTION 14 – TRANSPORT INFORMATION

Special Shipping Information:

TDG:

PIN: UN2735
Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.
(Aminoethylpiperazine/Diethylene Triamine)
Class: 8
PG: III

IMDG:

PIN: UN2735
Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.
(Aminoethylpiperazine/Diethylene Triamine)
Class: 8
PG: III

ICAO:

PIN: UN2735
Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.
(Aminoethylpiperazine/Diethylene Triamine)
Class: 8
PG: III

SECTION 15 – REGULATORY INFORMATION

WHMIS Classification..... **D2A, D2B, E**

CEPA All of the ingredients of this product are listed on the DSL.

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

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

SECTION 16 – OTHER INFORMATION

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		
CANUTEC		The Canadian Transport Emergency Centre of the Department of Transport		
C		Celsius		
CAS #		CAS Registry Number		
CEIL		Ceiling Limit		
CEPA		Canadian Environmental Protection Act, 1999		
CPR		Canadian Controlled Products Regulations		
DOT		Department of Transportation (U.S.)		
DSL		Domestic Substances List		
F		Fahrenheit		
FP		Flash Point		
g/kg		Grams/kilogram		
HMIS		Hazardous Materials Identification System		
IARC		International Agency for Research on Cancer		
ICAO		International Civil Aviation Organization		
IMO		International Maritime Organization		
IMDG		International Maritime Dangerous Goods Code.		
Kg		Kilogram		
Lb/gal		Pounds per Gallon		
LEL		Lower Explosive Limit		
LC ₅₀		Lethal Concentration (50% Death)		
LD ₅₀		Lethal Dosage (50% Death)		
ml/kg		Millilitres/kilogram		
mg/L		Milligrams per Litre		
mg/M3		Milligrams per Cubic Metre		
mmHg		Millimetres 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		
OSHA		Occupational Safety and Health Administration		
PEL		Permissible Exposure Limit		
PIN		Product Identification Number		
PG		Packing Group		
PMCC		Pensky-Martens Closed Cup		
ppm		Parts per million		
SARA		Superfund Amendments & Reauthorization Act (1986)		
SETA		Setaflash Closed Cup 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 Materials Information System		

End of Material Safety Data Sheet.