

MATERIAL SAFETY DATA SHEET

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Hi-Temp 1050ZN - Part A

Product Number: 1050ZN-Part A

Product Use: High Temperature Primer

Manufacturer/Supplier: Hi-Temp Coatings Technology

629 Massachusetts Avenue Boxborough, MA 01719

 Phone Number:
 1-978-635-1110

 Emergency Phone:
 1-813-248-0585

 Date of Preparation:
 June 18, 2012

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

EXTREMELY FLAMMABLE. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting.

Harmful: may cause lung damage if swallowed.

Inhalation: May cause respiratory tract irritation. Intentional misuse by deliberately

concentrating and inhaling the contents may be harmful or fatal. This product

may be aspirated into the lungs and cause chemical pneumonitis.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Vapours may cause drowsiness and dizziness.

Medical Conditions Aggravated By Exposure: Because of its irritating properties, product may aggravate preexisting skin, eye, and respiratory conditions.

Target Organs: Skin, eyes, gastrointestinal tract, respiratory system.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

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Section 3: COMPOSITION / INFORMATION ON INGREDIENTS			
Ingredient	CAS#	Wt. %	
Mica	12001-26-2	3 - 7	
Aromatic hydrocarbon	64742-95-6	1 - 5	
1,2,4-Trimethylbenzene	95-63-6	1 - 5	
1,3,5-Trimethylbenzene	108-67-8	0.1 - 1	
Isopropylbenzene	98-82-8	0.1 - 1	
Xylene	1330-20-7	5 - 10	
Ethylbenzene	100-41-4	1 - 5	
Toluene	108-88-3	1 - 5	
Acetone	67-64-1	10 - 30	

Section 4: FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15

minutes, including under lids. If easy to do, remove contact lenses, if worn. Get

medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of soap and water.

Remove contaminated clothing and shoes. Wash clothing before reuse. Call a

physician if irritation develops and persists.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial

respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical

personnel. Seek medical attention or call poison control.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately

(show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Flammable by WHMIS/OSHA criteria.

Means of Extinction:

Suitable Extinguishing Media: Powder, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a direct stream of water.

Products of Combustion: May include, and are not limited to: oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available. Sensitivity to Static Discharge: Not available.

Protection of Firefighters: Vapours can flow to distant ignition sources and flash back. Use water spray to keep fire-exposed containers cool. Keep upwind of fire. Wear full fire fighting turnout gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

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Environmental Precautions: Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

Methods for Containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Clean-Up: Scoop up material and place in a disposal container. Provide ventilation.

Other Information: Not available.

Section 7: HANDLING AND STORAGE

Handling:

Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Launder contaminated clothing before reuse. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Store in a cool place, away from incompatibles.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

	Exposure Limits		
Ingredient	OSHA-PEL	ACGIH-TLV	
		10 mg/m³ (total);	
Mica	20 mppcf	3 mg/m³ (resp)	
Aromatic hydrocarbon	5 mg/m³ (mist)	5 mg/m³ (mist)	
1,2,4-Trimethylbenzene	Not available.	Not available.	
1,3,5-Trimethylbenzene	Not available.	25 ppm	
	50 ppm;		
Isopropylbenzene	245 mg/m ³	50 ppm	
Xylene	100 ppm	100 ppm	
Ethylbenzene	100 ppm	20 ppm	
Toluene	200 ppm	20 ppm	
Acetone	750 ppm	500 ppm	

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

Eye/Face Protection: Wear eye/face protection.

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory

equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and

safety practices.

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Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Paint (when mixed with Part B).

Colour: Gray
Odour: Aromatic
Physical State: Liquid

pH: Not applicable

Viscosity: 400 – 600 cPs @ 100 rpm

Freezing Point: Not applicable

Boiling Point: 117°-168 °C (243°-335 °F)

Flash Point: $-20 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F})$

Evaporation Rate: < 1 (Butyl acetate =1)

Lower Flammability Limit: 1.0
Upper Flammability Limit: 6.6

Vapor Pressure: $231 \text{mm} @ 25 ^{\circ}\text{C}$ Vapor Density:Heavier than airSpecific Gravity:1.3 (water = 1)Solubility in Water:Not soluble.Auto-ignition Temperature: $860 ^{\circ}\text{F} [460 ^{\circ}\text{C}]$

Percent Volatile, vol. %: 60%

VOC content, wt. : < 3.5 lbs/gal (420 g/L)

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions. Keep in a cool place.

Conditions of Reactivity: Heat. Incompatible materials. **Incompatible Materials:** Acids. Bases. Strong oxidizers.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon. **Possibility of Hazardous Reactions:** No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

Ingredient	LD ₅₀ (oral)	LC ₅₀
Mica	Not available.	Not available.
		> 5.2mg/L 4hr, rat;
Aromatic hydrocarbon	8400 mg/kg, rat	3400 ppm 4hr, rat
1,2,4-Trimethylbenzene	3400 mg/kg, rat	18000 mg/m ³ 4hr, rat
1,3,5-Trimethylbenzene	5000 mg/kg, rat	24000 mg/m ³ 4hr, rat
Isopropylbenzene	1400 mg/kg, rat	39000 mg/m ³ 4hr, rat
		5000 ppm 4hr, rat;
Xylene	4300 mg/kg, rat	47635 mg/L 4hr, rat

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Ethylbenzene 3500 mg/kg, rat 17.2 mg/L 4hr, rat

12.5 mg/L 4hr, rat;

Toluene 636 mg/kg, rat 26700 ppm 1hr, rat Acetone 5800 mg/kg, rat Not available.

Eye: May cause eye irritation. Symptoms may include discomfort or pain, excess

blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin: May cause skin irritation. Symptoms may include redness, edema, drying,

defatting and cracking of the skin.

Ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting. Harmful:

may cause lung damage if swallowed.

Inhalation: May cause respiratory tract irritation. This product may be aspirated into the lungs

and cause chemical pneumonitis. Vapours may cause drowsiness and dizziness.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by WHMIS/OSHA criteria. **Carcinogenicity:** Hazardous by WHMIS/OSHA criteria.

Ingredient Chemical Listed as Carcinogen or Potential Carcinogen *

Mica Not listed. Aromatic hydrocarbon Not listed. 1,2,4-Trimethylbenzene Not listed. 1,3,5-Trimethylbenzene Not listed. Isopropylbenzene I-2B, N-2, CP65 Xylene G-A4, I-3 Ethylbenzene G-A3, I-2B, CP65 Toluene G-A4, I-3, CP65 Acetone G-A4

Mutagenicity: Not hazardous by WHMIS/OSHA criteria.

Reproductive Effects: Not hazardous by WHMIS/OSHA criteria.

Developmental Effects:

Teratogenicity: Hazardous by WHMIS/OSHA criteria. **Embryotoxicity:** Hazardous by WHMIS/OSHA criteria.

Respiratory Sensitization: Not hazardous by WHMIS/OSHA criteria.

Skin Sensitization: Not hazardous by WHMIS/OSHA criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: May cause long-term adverse effects in the aquatic environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

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^{*} See Section 15 for more information.

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Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

DOT Classification

UN1263; Paint; Class 3; PG II ORM-D (≤ 0.5L)

TDG Classification

UN1263; Paint; Class 3; PG II Limited Quantity (≤ 0.5L)

Section 15: REGULATORY INFORMATION

Federal Regulations

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

US: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200).

SARA Title III

Ingredient	Section 302	Section 304	CERCLA	Section
	(EHS) TPQ (lbs.)	EHS RQ (lbs.)	RQ (lbs.)	313
Mica	Not listed.	Not listed.	Not listed.	Not listed.
Aromatic hydrocarbon	Not listed.	Not listed.	Not listed.	Not listed.
1,2,4-Trimethylbenzene	Not listed.	Not listed.	Not listed.	313
1,3,5-Trimethylbenzene	Not listed.	Not listed.	Not listed.	Not listed.
Isopropylbenzene	Not listed.	Not listed.	5,000	313
Xylene	Not listed.	Not listed.	100	313
Ethylbenzene	Not listed.	Not listed.	1,000	313
Toluene	Not listed.	Not listed.	1,000	313
Acetone	Not listed.	Not listed.	5,000	313

State Regulations

California Proposition 65:

This product contains chemicals known to the State of California to cause cancer.

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Global Inventories

Ingredient	Canada DSL/NDSL	USA TSCA
Mica	DSL	No.
Aromatic hydrocarbon	DSL	Yes.
1,2,4-Trimethylbenzene	DSL	Yes.
1,3,5-Trimethylbenzene	DSL	Yes.
Isopropylbenzene	DSL	Yes.
Xylene	DSL	Yes.
Ethylbenzene	DSL	Yes.
Toluene	DSL	Yes.
Acetone	DSL	Yes.

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HMIS - Hazardous Materials Identification System

Health - 2* Flammability - 3 Physical Hazard - 0 PPE - H

NFPA - National Fire Protection Association:

Health - 2 **Fire** - 3 Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

Class B2 - Flammable Liquid Class D2A - Carcinogenicity

Class D2A - Teratogenicity and Embryotoxicity

Class D2B - Skin/Eye Irritant

WHMIS Hazard Symbols:





SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

OSHA (O) Occupational Safety and Health Administration.

ACGIH (G) American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen. A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.

4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

1 - Known to be carcinogens.

2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

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Prepared by: Nexreg Compliance Inc.

Phone: (519) 488-5126

www.nexreg.com

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