

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Hi-Temp 1000VS Series, White, Black and Grays
Product Number: 1000VS-300-White, 1000VS-00-Black, 1000VS-902-Cloudy Gray, 1000VS-904-Medium Gray, 1000VS-906-Thunder Gray
Product Use: High Temperature Topcoats
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: March 30, 2012

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING

FLAMMABLE. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. IRRITATING TO SKIN. 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: Irritating to 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.

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, respiratory, kidney, heart, and auditory 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.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
Dimethyl carbonate	616-38-6	10 - 30
Xylene	1330-20-7	7 - 13
Ethylbenzene	100-41-4	1 - 5
Toluene	108-88-3	0.1 - 1
Mica	12001-26-2	1 - 5

Section 4: FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. 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, organic compounds.
- 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 turn-out 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.
- 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. 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. Do not store at temperatures above 38 °C / 100 °F. Unused chemicals should not be returned to the container.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Dimethyl carbonate	Not available.	Not available.
Xylene	100 ppm	100 ppm
Ethylbenzene	100 ppm	20 ppm
Toluene	200 ppm	20 ppm
Mica	20 mppcf	10 mg/m ³ (total); 3 mg/m ³ (resp)

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.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Not available.
Colour:	Various.
Odour:	Not available.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Viscosity:	Not available.
Freezing Point:	Not available.
Boiling Point:	90 - 139 °C (194 - 282 °F)
Flash Point:	~ 18 °C (64 °F)
Evaporation Rate:	> 1 (Butyl acetate = 1)
Lower Flammability Limit:	0.7

Upper Flammability Limit:	7.9
Vapor Pressure:	Not available.
Vapor Density:	> 1 (Air = 1)
Specific Gravity:	1.43 (Water = 1)
Solubility in Water:	Not available.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not available.
Percent Volatile, vol. %:	45.41%
VOC content, wt. %:	3.31 lbs/gal [396 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, organic compounds.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

Ingredient	LD₅₀ (oral)	LC₅₀
Dimethyl carbonate	13000 mg/kg, rat	140 mg/L 4 hr, rat
Xylene	4300 mg/kg, rat	5000 ppm 4hr, rat
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
Mica	Not available.	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: Irritating to skin. 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

Dimethyl carbonate
Xylene
Ethylbenzene
Toluene
Mica

**Chemical Listed as Carcinogen or
Potential Carcinogen ***

Not listed.
G-A4, I-3
G-A3, I-2B, CP65
G-A4, I-3, CP65
Not listed.

* See Section 15 for more information.

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.

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 (≤ 5L)

TDG Classification

UN1263; Paint; Class 3; PG II
Limited Quantity (≤ 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 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Dimethyl carbonate	Not listed.	Not listed.	Not listed.	Not listed.
Xylene	Not listed.	Not listed.	100	313
Ethylbenzene	Not listed.	Not listed.	1,000	313
Toluene	Not listed.	Not listed.	1,000	313
Mica	Not listed.	Not listed.	Not listed.	Not listed.

State Regulations

California Proposition 65:

This product contains a chemical 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
Dimethyl carbonate	DSL	Yes.
Xylene	DSL	Yes.
Ethylbenzene	DSL	Yes.
Toluene	DSL	Yes.
Mica	DSL	No.

HMIS - Hazardous Materials Identification System

Health - 2* Flammability - 2 Physical Hazard - 0 PPE – F

NFPA - National Fire Protection Association:

Health - 2 Fire - 2 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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