

**W. R. GRACE**  
MATERIAL SAFETY DATA SHEET

Product Name: HTS - XE Black  
MSDS ID Number: Z- 01656

MSDS Date: 09/05/2006

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** HTS - XE Black  
**MSDS Number:** Z-01656  
**Cancelled MSDS Number:** Z-01649  
**MSDS Date:** 09/05/2006  
**Chemical Family Name:** Chemically Delaminated Vermiculite (from South Carolina Ore Concentrate Disperse  
**Product Use:** High Temperature Coating, Filler, Binder  
**Chemical Formula:** Mixture-NA  
**CAS # (Chemical Abstracts Service Number):** Mixture-NA  
**Manufactured by:**  
W.R.Grace & Co.-Conn. Grace Canada, Inc.  
62 Whittemore Avenue 294 Clements Road West  
Cambridge, MA 02140 Ajax, Ontario L1S 3C6

**In Case of Emergency Call:**

In USA: (617) 876-1400 In Canada: (905) 683-8561

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Ingredient</b>	<b>CAS#</b>	<b>Percent (max)</b>
Vermiculite Dispersion	110638-71-6	10-25
Carbon black.	001333-86-4	< 1
Quartz	014808-60-7	< 1

**SECTION 3 - HAZARDS IDENTIFICATION**

**Emergency Overview:**

**Caution!**

Causes eye irritation.  
May cause respiratory irritation.  
Causes digestive tract irritation if ingested.

**HMIS Rating:**

Health: 1  
Flammability: 0  
Reactivity: 0  
Personal Protective Equipment: B (See Section 8)

**Potential Health Effects:**

**Inhalation:** Overexposure is not likely to occur unless specific use generates dust, vapors or mist.

Inhalation may cause slight irritation to respiratory passages.

**Eye Contact:** Eye contact causes irritation.

Prolonged eye contact can result in tissue damage.

**Skin Contact:** Acute skin contact is not expected to result in adverse effects.

Prolonged skin contact can result in skin irritation.

**Skin Absorption:** Not expected to be harmful if absorbed through the skin.

**Ingestion:** If ingested, causes irritation to the linings of the mouth, esophagus and stomach.  
Effects include: Irritation or upset stomach.

**SECTION 4 - FIRST AID MEASURES:**

**Skin Contact:** Wash with soap and water.

If discomfort or irritation persists, consult a physician.

Remove contaminated clothing and wash before reuse.

**Eye Contact:** Flush eyes with water for at least 15 minutes while holding eyelids open.

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If discomfort or irritation persists, consult a physician.

**Ingestion:** Dilute with large quantities of water.

Consult a physician if symptoms develop.

Never give anything by mouth to an unconscious person.

**Inhalation:** If symptoms develop, get fresh air. If symptoms persist, consult a physician.

If breathing has stopped, give artificial respiration then oxygen if needed.

**SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

**Flash Point:** Not Applicable (Aqueous solution)  
**Flash Point Method:** Not Applicable  
**Lower Explosion Limit:** Not Available  
**Upper Explosion Limit:** Not Available  
**Auto-Ignition Temperature:** Not Available

**NFPA Rating:**

**Health:** 1  
**Flammability:** 0  
**Reactivity:** 0

**Extinguishing Media:** Not Applicable. Product will not burn.

**Special Fire Fighting Procedures:**

None

No special procedures specific to this product.

**Unusual Fire and Explosion Hazards:** None.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES:**

**Spills/Leaks:** Use proper personal protective equipment. Collect liquid or absorb liquid with an inert, non combustible material and remove for disposal.

**SECTION 7 - HANDLING AND STORAGE**

**Precautionary Measures:**

Avoid contact with eyes, skin and clothing.

Do not take internally.

Practice good personal hygiene to avoid ingestion.

Use only with adequate ventilation.

Wash clothing before reuse.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

**SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT**

**EXPOSURE GUIDELINES (US)**

Ingredient	ACGIH TLV			OSHA PEL			Other
	TWA	STEL	Ceiling	TWA	STEL	Ceiling	
Vermiculite Dispersion	-	-	-	-	-	-	-
Carbon black.	3.5 mg/m3 TWA	-	-	3.5 mg/m3 TWA	-	-	-
Quartz	0.025 mg/m3 TWA (respirable fraction)	-	-	((250)/(%SiO2 + 5) mppcf TWA (respirable)); ((10)/(%SiO2 + 2) mg/m3 TWA (respirable)); ((30)/(%SiO2 + 2) mg/m3 TWA (total dust))	-	-	-

Respirable Quartz (Crystalline Silica) and carbon black may result in lung disease (i.e. silicosis and or lung cancer). However, due to the physical nature of this product, (liquid) exposures are not expected unless product dries, it is abraded and airborne dust is created.

**EXPOSURE GUIDELINES (CANADA)**

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Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

**Engineering Controls:** Not generally required.

**Personal Protective Equipment:**

**Respiratory Protection:** Respiratory protection may be desirable if dust/mist is created in handling and is required at or above the Permissible Exposure Limits (PELs). A dust/mist respirator such as a 3M type P-95 is recommended.

**Skin Protection:** Gloves are recommended.

**Eye Protection:** Safety glasses or goggles should be worn.

**Work/Hygienic Practices:** Use good personal hygiene practices.

This product is chemically delaminated vermiculite dispersed in 80-95% water. The vermiculite used in this product is a naturally-occurring mineral mined in South Carolina, which can contain tremolite in the ore body. Except for trace amounts, the tremolite, which is predominantly non-fibrous, is removed from the vermiculite during processing.

In an effort to assure this product's high purity, WR-Grace & Co. has retained the services of an outside independent laboratory. This laboratory has analyzed samples using state-of-the-art techniques. No fibrous tremolite has been detected.

Quartz (Crystalline silica) is a naturally occurring mineral that is contained in materials that are mined from the earth's surface such as sand, limestone, clay and gypsum (calcium sulfate). Total quartz is a value representing the combined fraction of large non-respirable sized particles and respirable sized particles (less than ten microns in aerodynamic diameter). It is only the respirable sized fraction of total quartz that is recognized as hazardous by professionals in the field of Occupational Health and most regulatory agencies.

Due to the physical nature of this product, (liquid) Quartz (Crystalline silica) exposures are not likely to reach exposure limits unless after product dries, it is abraded and airborne dust is created.

Carbon black is one of the most common coloring agents in use today. It is used in newspaper printing inks, copy machine toner and in paints. In March of 1996, the International Agency for Research on Cancer (IARC) classified Carbon black as a known animal carcinogen and a possible human carcinogen. The recommendation was based on the results of rat inhalation studies of Carbon black, despite the lack of any parallel evidence in humans or other animal species. Carbon black contains less than 0.1% of adsorbed PAHs (polynuclear aromatic hydrocarbons) and it is not listed by the National Toxicology Program (NTP), the Occupational Safety and Health Administration (OSHA) or the National Institute of Occupational Safety and Health (NIOSH) as a carcinogen.

Due to the physical nature of this product, (liquid) Carbon black exposures are not likely to reach exposure limits unless after product dries, it is abraded and airborne dust is created.

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid
<b>Appearance/Odor:</b>	Aqueous dispersion, white, no appreciable odor
<b>Odor Threshold:</b> (ppm)	Not Determined
<b>PH:</b>	6.5-9.0
<b>Vapor Pressure:</b> (Mm Hg)	20 @ 22 deg. C
<b>Vapor Density:</b> (Air = 1)	1.18 @ 22C
<b>Solubility In Water:</b>	Miscible with water
<b>Specific Gravity:</b> (Water = 1)	1.05 - 1.10
<b>Evaporation Rate:</b> (Butyl Acetate = 1)	Unknown
<b>Boiling Point:</b>	>212°F/100°C
<b>Viscosity:</b>	Unknown
<b>Bulk Density:</b> (Pounds/Cubic Foot)(Pcf)	Not Applicable
<b>% Volatiles</b> (70°F) (21°C)	80 - 95 % (As water)

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**SECTION 10 - STABILITY AND REACTIVITY**

**Chemical Stability:** Stable  
**Conditions To Avoid:** None known for this product.  
**Hazardous Polymerization:** Will not polymerize.  
**Hazardous Decomposition Products:** Carbon dioxide, Carbon monoxide and Acrid smoke.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

**Ingredient(No data unless listed.)**                      **CAS Number**                      **LD50 and LC50**

**Carcinogenicity:**

Ingredient	IARC Group 1	IARC Group 2A	IARC Group 2B	NTP Known	NTP Suspect	OSHA
Vermiculite Dispersions	No	No	No	No	No	No
Carbon black.	No	No	Yes	No	No	Yes
Quartz	Yes	No	No	No	No	Yes

Carbon Black contained in this product has been classified as possibly carcinogenic to humans. (IARC Group 2B) Review of studies concluding these findings are questionable due to study design and methodology. Furthermore, review of these studies indicates that work environment concentrations of carbon black were considerably greater than current occupational exposure standards. Carbon Black contains >0.1% of absorbed PAHs (polynuclear aromatic hydrocarbons). In the non-absorbed form PAHs have been found to be carcinogenic in animal studies. No effects have been observed in humans.

**Mutagenicity:** Not applicable.  
**Teratogenicity:** Not applicable.  
**Reproductive Toxicity:** Not applicable.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Environmental Fate:** No data available for product.  
**Ecotoxicity:** No data available for product.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Waste Disposal Procedures:**  
Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.  
According to US EPA (40 CFR § 261.3) waste of this product is not defined as hazardous.

**SECTION 14 - TRANSPORTATION INFORMATION**

**Proper Shipping Name:** Not Applicable  
**UN/NA Number:** Not Applicable  
**Domestic Hazard Class:** Nonhazardous  
**Surface Freight Classification:** Not Applicable  
**Label/Placard Required:** Not Applicable

**SECTION 15 - REGULATORY INFORMATION**

**REGULATORY CHEMICAL LISTS:**

**CERCLA (Comprehensive Response Compensation and Liability Act):**  
**(None present unless listed below)**

**Chemical Name**                      **CAS #**                      **Wt %**                      **CERCLA RQ**  
**SARA Title III (Superfund Amendments and Reauthorization Act)**

**SARA Section 312/Tier I & II Hazard Categories:**  
Health Immediate (acute)                      No  
Health Delayed (chronic)                      No  
Flammable                      No  
Reactive                      No  
Pressure                      No

**302 Reportable Ingredients (Identification Threshold 1%.):**

