

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS PREPARED BY: Environmental Health Dept.-Grace Construction Products

W.R.Grace & Co.-Conn.

Grace Canada, Inc.

62 Whittemore Ave.

294 Clements Rd. West

Cambridge, MA 02140

Ajax, Ontario, L1S 3C6

Telephone Number for Information and Emergency Response

In USA: (617) 876-1400

In Canada: (905) 683-8561

MSDS Number: Z-01484 000001 Cancels MSDS # Z-01356, Z-01357, Date: 06/16/2003
 Z-01380, Z-01381,
 Z-01428, Z-01429,
 Z-01431, Z-01455,
 Z-01457, Z-01481,
 Z-01482

Trade Names and Synonyms:
 (SEE SECTION 16 FOR ADDITIONAL
 PRODUCT IDENTIFICATION)

MONOKOTE[®] MK6, MK6/HY and MK-6s
 (All Colors)

Chemical Names and Family:

Lightweight Gypsum-Aggregate Plaster

Product Use:

Fireproofing Product

Formula:Blend Of Gypsum, Clay, Limestone,
Styrene Polymer & CelluloseCAS# (Chemical Abstract Service):

MIXTURE-NA

SECTION 2 - HAZARDOUS INGREDIENT AND MAJOR COMPONENT INFORMATION
 (See Section 11 for Complete Chemical Names)

EXPOSURE LIMITS

INGREDIENT:	Max. % By Wt.	Exposure Limits		
		OSHA	ACGIH	OTHER
PLASTER OF PARIS (GYPSUM) CAS# 26499-65-0	90.00	15 mg/m ³ -TWA as Total Dust 5 mg/m ³ - TWA as Respirable Dust	10 mg/m ³ -TWA as Total Dust	None Established
CARBON BLACK CAS# 1333-86-4	2.00	3.5 mg/m ³ - TWA	3.5 mg/m ³ - TWA	NIOSH: 3.5 mg/m ³ - TWA
CLAY CAS# 12174-11-7/ 8031-18-3	10.00	None Established	None Established	None Established
NUISANCE PARTICULATES CAS# N/A	N/A	15 mg/m ³ - TWA as Total Dust 5 mg/m ³ - TWA as Respirable Dust	10 mg/m ³ - TWA as Total Dust 3 mg/m ³ - TWA as Respirable Dust	None Established
QUARTZ (CRYSTALLINE SILICA) CAS# 14808-60-7	5.00	30 mg/m ³ +(% SiO ₂ +2)-TWA as Total Dust 10 mg/m ³ +(% SiO ₂ +2)-TWA as Respirable Dust	0.1 mg/m ³ - TWA as Respirable Dust	NIOSH: 0.05 mg/m ³ - TWA as Respirable Du
CALCIUM CARBONATE CAS# 1317-65-3	5.00	15 mg/m ³ - TWA as Total Dust 5 mg/m ³ - TWA as Respirable Dust	10 mg/m ³ - TWA as Total Dust	None Established

SECTION 2 - HAZARDOUS INGREDIENT AND MAJOR COMPONENT INFORMATION
(See Section 11 for Complete Chemical Names) (Cont'd)

EXPOSURE GUIDELINES - CANADA

Employers should check with provincial regulatory agencies for exposure guidelines, which may vary locally.

SECTION 3 - HAZARDS IDENTIFICATION

Emergency Overview:**Warning Statements:**

CAUTION! MAY CAUSE EYE AND RESPIRATORY IRRITATION.

- ... Contains Plaster of Paris CAS# 26499-65-0 with less than 5% Quartz (Crystalline silica) CAS# 14808-60-7, Calcium carbonate CAS# 1317-65-3, Clay CAS# 12174-11-7/8031-18-3, Cellulose CAS# 65996-61-4 and Styrene polymer CAS# 9003-53-6. Grey, charcoal and black products also contain Carbon black CAS# 1333-86-4.
- ... May be irritating if inhaled resulting in coughing and sneezing.
- ... Prolonged and repeated exposure to respirable Crystalline silica and Carbon black can decrease lung function and create risk of lung disease (i.e., silicosis and/or lung cancer).
- ... May cause minor mechanical irritation to eyes. Direct contact with spray can damage eyes.
- ... Wet material falling on floors, stairs, or other surfaces will cause these surfaces to become slippery.
- ... Volatile Organic Compound (VOC) Content; 0.0 grms/l EPA-24 (Below Detectable Limit).
- ... Read and understand all Health and Safety information on the product Label and Material Safety Data Sheet before use.

NPCA-HMIS Hazard Index:

- o Health: 1 *
- o Flammability: 0
- o Reactivity: 0
- o Personal Protection: B,E
(See Section 8)

Potential Health Effects**Routes of Exposure:****Inhalation:**

Exposure to excessive airborne dust may cause coughing, sneezing and dyspnea (shortness of breath, labored breathing).

Exposure may also aggravate chronic respiratory conditions such as asthma or bronchitis. Long-term inhalation of dust may increase the risk of contracting pneumoconiosis ("dusty lungs") and may also decrease lung function. Prolonged and repeated exposure to respirable silica and Carbon black can result in lung disease (i.e., silicosis and/or lung cancer).

SECTION 3 - HAZARDS IDENTIFICATION (Cont'd)

Skin and Eye:

EYE contact with dust may cause minor mechanical irritation. Direct eye contact with MONOKOTE® may cause physical injury. Prolonged or repeated SKIN contact may dry skin.

Ingestion:

Not expected to be harmful.

Carcinogenicity Information:

Crystalline silica has been classified as a probable human carcinogen (Group 1) by the International Agency for Research on Cancer (IARC). The National Toxicology Program (NTP) has concluded that respirable Crystalline silica is "reasonably anticipated to be a carcinogen" (N2) based on sufficient animal and limited human data. The substance is also recognized by OSHA as a carcinogen.

Carbon black is listed by IARC as a known animal carcinogen and possible human carcinogen, (Group 2B) based on rat inhalation studies.

(See Section 8 - Supplemental Information for additional detail.)

SECTION 4 - FIRST AID MEASURES

EYE: In case of contact with eyes, immediately flush eyes with plenty of water. Do not rub eyes. If blinking or tearing persist, see a physician.

SKIN: In case of contact with skin, wash affected area with soap and water.

INHALATION: If inhaled, get fresh air. If symptoms of irritation occur and persist, consult a physician.

INGESTION: If swallowed, call a doctor or poison control center immediately. The decision to induce vomiting should be made by a physician. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE FIGHTING MEASURES

<u>Flash Point:</u> Not Applicable	<u>Flammable Limits:</u>	
<u>Method Used:</u> Not Applicable	<u>LEL</u> N/A	<u>UEL</u> N/A
<u>N.F.P.A. Rating:</u> Not Applicable		

Extinguishing Media
Not Applicable

Special Fire Fighting Procedures
None Known

Unusual Fire and Explosion Hazards
None Known

SECTION 6 - ACCIDENTAL RELEASE MEASURES

If spilled, prevent material from entering water systems. Observing the listed Precautionary Measures found in Section 7 of this document:

- Dry spills should be immediately swept up and placed in a suitable container to prevent further release of material.
- Slurry spills should be immediately contained (to minimize the extent of the spill) and absorbed with an inert, non-combustible material. Place material in a suitable container to prevent further release.

SECTION 7 - HANDLING AND STORAGE INFORMATION

Precautionary Measures:

- ... Avoid creating and inhaling dust.
- ... Equip mixers with dust covers.
- ... Provide ventilation and/or respiratory protection.
- ... Wear eye protection to avoid contact with dust or spray.
- ... Post "Slippery When Wet" signs where appropriate.
- ... Use antislip surfaces on working platforms.
- ... FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation:

- Local Exhaust: Exhaust fans may be necessary when mixing in enclosed areas.
- Mechanical: Exhaust fans may be necessary when mixing in enclosed areas.
- Special: Not Applicable
- Other: Not Applicable

Respiratory Protection:

Wear NIOSH-approved respiratory protection (generally a N-95 dust mask is appropriate) to prevent employee exposures from exceeding the limits specified in Section 2.

Skin Protection:

Work gloves or hand creams are recommended to prevent drying of skin.

Eye Protection:

Proper eye protection is required. At a minimum safety glasses with side shields should be worn where exposure to excessive dust or spray is likely.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont'd)

Other Protective Clothing or Equipment:

Normal work clothes.

Work/Hygienic Practices:

Use bag opening and disposal procedures which minimize dust release. Equip mixers with dust covers to minimize dust released during mixing cycle.

Prior to welding or cutting, MONOKOTE® must be removed from steel surfaces in those immediate areas where exposure to excessive heat, applied either directly or through conduction, from cutting or welding operations is possible.

Remove fireproofing materials in a manner so as to minimize the creation of dust. All trades must exercise work practices which avoid creating dust. This may be accomplished by:

- Wetting fireproofing materials using water, prior to its removal.
- Removing small areas of fireproofing at one time.
- Maintaining a clean worksite.

SUPPLEMENTAL INFORMATION

Quartz (Crystalline silica) is a naturally- occurring mineral that is commonly 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 usually representing the combined fractions of non-respirable sized particles and of respirable sized particles (less than ten microns in aerodynamic diameter). It is only the respirable fraction of total quartz that is recognized as hazardous by professionals in the field of Occupational Health and by most regulatory agencies. Grace measures employee exposure to respirable silica at our manufacturing plants. All results have been well below the applicable exposure limits defined in Section 2 of this MSDS.

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 used in Monokote® 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.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont'd)

Clay contained in Monokote® may contain very small particles which might be described as microfibrinous (0.02-0.1 µm diameter and 0.1-2.5 µm in length with a mean particle length of 0.4 µm). These particles are not regulated as fibers. Studies to date show that these particles are not fibrogenic nor carcinogenic and unlikely to cause pulmonary dysfunction.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<u>Boiling Point</u> : Not Applicable	<u>Specific Gravity</u> (H ₂ O=1) Not Applicable
<u>Vapor Pressure</u> (mm Hg.) Not Applicable	<u>% Volatiles</u> Not Applicable
<u>Vapor Density</u> (AIR = 1) Not Applicable	<u>Evaporation Rate</u> Not Applicable (Butyl Acetate = 1)
<u>Solubility in Water</u> : Slight	<u>pH</u> Approx. Neutral Varies with water
<u>Bulk Density</u> (#/cu. ft): 12-16 PCF	
<u>Appearance and Odor</u> : Coarse, free flowing white to black powder, no odor. (May also be available in special order colors.)	

Odor Threshold:
Not Determined

SECTION 10 - STABILITY AND REACTIVITY

Stable under normal conditions (yes or no): YES

Conditions or Materials to avoid (which may react or cause instability):

Prior to welding or cutting, MONOKOTE® must be removed from steel surfaces in those immediate areas where exposure to excessive heat applied either directly or through conduction from cutting or welding operations is possible.

Hazardous Decomposition or Byproducts:

As a result of incomplete combustion, Styrene monomers and polymers may be given off. Temperatures in excess of 4000°F may generate Sulfur dioxide (SO₂). Upon complete combustion, Carbon monoxide and Carbon dioxide are released.

Hazardous Polymerization:

Will not occur.

Conditions to Avoid:

Not Applicable

SECTION 11 - TOXICOLOGICAL INFORMATION

INGREDIENT (Chemical Name, CAS#, & Common Name)	TOXICITY DATA: LD ₅₀ & LC ₅₀ (See Section 2 for Exposure Limits)
Plaster of Paris (Gypsum) CAS# 26499-65-0	No Toxicity Data Available
Quartz (Crystalline Silica) CAS# 14808-60-7	No Toxicity Data Available
Calcium Carbonate (Limestone) CAS# 1317-65-3	No Toxicity Data Available
Carbon Black CAS# 1333-86-4	LD ₅₀ (Oral/Rat) >15,400 mg/kg
Clay (Attapulgit, Fuller's Earth) CAS# 12174-11-7/8031-18-3	No Toxicity Data Available

Reproductive Toxicity - Not Applicable
Teratogenicity - Not Applicable
Mutagenicity - Not Applicable
Toxicologically Synergistic Products - Not Applicable
Sensitization - Not Applicable
Irritancy - Not Applicable

Specific toxicity tests have not been conducted on this product.
Our hazard evaluation is based on information from similar products,
the raw material manufacturer's MSDS, technical literature, and/or
professional experience.

SECTION 12 - ECOLOGICAL INFORMATION

None Available At This Time

SECTION 13 - DISPOSAL CONSIDERATIONS

Consult all regulations (federal, state, provincial, local) or a
qualified waste disposal firm when characterizing waste for disposal.
Dispose of waste in accordance with all applicable regulations.

Waste of this product such as empty bags and excess material are typically
not defined as hazardous.

SECTION 14 - TRANSPORT INFORMATION

Transportation Hazard Classification

PROPER SHIPPING: Not Applicable

NAME

HAZARD CLASS: Nonhazardous
IDENTIFICATION #: Not Applicable
LABEL(s) REQUIRED: Not Applicable

Surface Freight Classification: Wall Plaster

SECTION 15 - REGULATORY INFORMATION

(Not Meant To Be All Inclusive
Selected Regulations Represented)

SARA TITLE III REPORTING INFORMATION**Tier I & II HAZARD CATEGORIES:**

DELAYED (CHRONIC) HEALTH
IMMEDIATE (ACUTE) HEALTH

Contains Extremely Hazardous-SARA III Section 302 Ingredient: NO
Comments:

Contains Toxic Chemical Release-SARA III Section 313 Ingredient: NO
Comments:

Other Government Reporting Requirements:**CHEMICAL INVENTORY CERTIFICATION:****For U.S. Products ONLY**

All ingredients contained in this product are included on the US EPA Toxic Substances Control Act (TSCA) Inventory or exempt from listing on the TSCA Inventory.

For Canadian Products ONLY

All ingredients contained in this product comply with the requirements of the Canadian Environmental Protection Act (CEPA) and are listed on the Domestic Substance List (DSL) or Non-Domestic Substance List (NDSL).

CALIFORNIA PROPOSITION 65 INFORMATION: WARNING! This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

NATIONAL VOLATILE ORGANIC COMPOUND EMISSION STANDARDS FOR ARCHITECTURAL COATINGS:

Volatile Organic Compound (VOC) Content; 0.0 grms/l EPA-24
(Below Detectable Limit).

WHMIS CLASS: D-2A

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

Nonhazardous Ingredient Disclosure:

Cellulose Filler CAS# 65996-61-4 and Styrene polymer CAS# 9003-53-6.

SECTION 16 - OTHER INFORMATION

The information contained in this Material Safety Data Sheet is applicable to the following products:

Monokote® MK-6 (All Colors)
Monokote® MK-6/HY (All Colors)
Monokote® MK-6s (All Colors)

"THE DATA INCLUDED HEREIN ARE PRESENTED IN ACCORDANCE WITH VARIOUS ENVIRONMENT, HEALTH AND SAFETY REGULATIONS. IT IS THE RESPONSIBILITY OF A RECIPIENT OF THIS DATA TO REMAIN CURRENTLY INFORMED ON CHEMICAL HAZARD INFORMATION, TO DESIGN AND UPDATE ITS OWN PROGRAM AND TO COMPLY WITH ALL NATIONAL, FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS APPLICABLE TO SAFETY, OCCUPATIONAL HEALTH, RIGHT-TO-KNOW AND ENVIRONMENTAL PROTECTION."