

MEDIUM GREY - ICC-ES ESR-1221 1-PART ROOF COATING

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name: Momentive Performance Materials LLC
260 Hudson River Road
Waterford NY 12188

Revised: 04/01/2013
Prepared by Product Safety Team
CHEMTREC 1-800-424-9300
MSDS Contact 1-888-443-9466
Information 4information@momentive.com

Chemical Family/Use: Architectural Coating

Formula: Mixture

HMIS

Health: 2 Flammability: 2 Reactivity: 0

NFPA

Health: 2 Flammability: 2 Reactivity: 0

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING! Flammable liquid and vapor. Harmful by inhalation and if swallowed. Irritating to eyes, respiratory system and skin.

Form: Liquid

Form: Gray

Odor: Faint

POTENTIAL HEALTH EFFECTS

INGESTION

Harmful if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage. Causes vomiting, nausea, and diarrhea. Irritation of the mouth, throat, and stomach.

SKIN

Prolonged contact may cause dryness of the skin.

INHALATION

Harmful if inhaled. Irritating to respiratory system. May irritate mouth, nose, and throat. High concentrations of vapors may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. Can cause unconsciousness if inhaled. Applies in uncured state. A dust hazard may be created if, under conditions of use, solid particles are separated from the polymeric matrix.

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Causes eye irritation. Causes redness and tearing.

MEDICAL CONDITIONS AGGRAVATED

Central nervous system disorders. Skin disorders and allergies.

SUBCHRONIC (TARGET ORGAN)

Dermatitis; Central nervous system.; This product contains a component that is tumorigenic.

CHRONIC EFFECTS / CARCINOGENICITY

This product or one of its ingredients present, at 0.1% or more, is listed as a carcinogen by NTP, IARC or OSHA.

This product contains greater than 0.1% crystalline silica. The International Agency for Research on Cancer (IARC) previously determined there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals and limited evidence of carcinogenicity in humans. In a recent re-evaluation of crystalline silica by IARC, it was determined that there is sufficient evidence for the carcinogenicity of inhaled crystalline silica in the forms of Quartz and Cristobalite in humans. The overall evaluation for these two forms of silica is elevated to known human carcinogen (IARC class I).

ROUTES OF EXPOSURE

Dermal; Eye; Oral

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>PRODUCT COMPOSITION</u>	<u>CAS-No.</u>	<u>WGT. %</u>
<u>A. HAZARDOUS</u>		
Stearic Acid	57-11-4	1 - 5 %
NAPHTHA	64741-41-9	10 - 30 %
Methyltrimethoxysilane	1185-55-3	1 - 5 %
Octamethylcyclotetrasiloxane	556-67-2	0.1 - 1 %
QUARTZ	14808-60-7	0.1 - 1 %
<u>B. NON-HAZARDOUS</u>		
CALCIUM CARBONATE	1317-65-3	30 - 60 %

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Siloxanes and Silicones, di-Me hydroxy terminated	70131-67-8	30 - 60 %
Treated Silica	68937-51-9	1 - 5 %

4. FIRST AID MEASURES**INGESTION**

If swallowed, do NOT induce vomiting. Give a glass of water.

SKIN

Wash area with soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

EYES

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

NOTE TO PHYSICIAN

None known.

5. FIRE-FIGHTING MEASURES

FLASH POINT:	ca. 50 °C; 122 °F
IGNITION TEMPERATURE:	ca. 232 °C; 450 °F
FLAMMABLE LIMITS LEL:	ca. 1.0 %(V).
FLAMMABLE LIMITS UEL:	ca. 6.0 %(V).

SENSITIVITY TO MECHANICAL IMPACT: No

SENSITIVITY TO STATIC DISCHARGE

Sensitivity to static discharge is expected; material has a flash point below 200 F.

EXTINGUISHING MEDIA

All standard extinguishing agents are suitable.

SPECIAL FIRE FIGHTING PROCEDURES

Combustible, Wear appropriate personal protective equipment.

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Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal. Wear proper protective equipment as specified in the protective equipment section. Warn other workers of spill. Keep unauthorized personnel away.

7. HANDLING AND STORAGE**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE**

Keep container closed. Use only in well-ventilated areas. Avoid contact with eyes, skin, and clothing. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**ENGINEERING CONTROLS**

Safety shower.; Use only in well-ventilated areas.

RESPIRATORY PROTECTION

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

PROTECTIVE GLOVES

Rubber gloves are recommended.

EYE AND FACE PROTECTION

Safety glasses with side shields; Monogoggles

OTHER PROTECTIVE EQUIPMENT

Wear rubber apron.; Wear suitable protective clothing and eye/face protection.

Exposure Guidelines

<u>Component</u>	<u>CAS-No.</u>	<u>Source</u>	<u>Value</u>
QUARTZ	14808-60-7	ACGIH, TWA	Respirable fraction. 0.025 mg/m3
Octamethylcyclotetrasiloxane	556-67-2	Z_INTL_OEL, REL	5 ppm

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Absence of values indicates none found

PEL - OSHA Permissible Exposure Limit; TLV - ACGIH Threshold Limit Value; TWA - Time Weighted Average; INTL REL - Internal Recommended Exposure Limit

OSHA revoked the Final Rule Limits of January 19, 1989 in response to the 11th Circuit Court of Appeals decision (AFL-CIO v. OSHA) effective June 30, 1993. See 29 CFR 1910.1000 (58 FR 35338).

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (°C):	ca.156 °C; 313 °F
VAPOR PRESSURE (20 C) (MM HG):	No data available.
VAPOR DENSITY (AIR=1):	No data available.
FREEZING POINT:	No data available.
PHYSICAL STATE:	Liquid
ODOR:	Faint
Color:	Gray
EVAPORATION RATE (BUTYL ACETATE=1):	No data available.
SPECIFIC GRAVITY:	ca. 1.276
DENSITY:	ca. 1.276 g/cm ³
ACID / ALKALINITY (MEQ/G):	No data available.
pH:	Not applicable
SOLUBILITY IN WATER (20 C):	Insoluble
SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT):	Soluble in Petroleum Distillate
VOLATILE ORGANIC CONTENT:	17.8 %(m)
VOC EXCL. H₂O & EXEMPTS (G/L):	228 g/l

10. STABILITY AND REACTIVITY**STABILITY**

Stable

HAZARDOUS POLYMERIZATION.

Hazardous polymerisation does not occur.

HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS

Carbon dioxide; Silicon dioxide.; Formaldehyde.; This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. A MSDS for formaldehyde is available from Momentive.

INCOMPATIBLE MATERIALS

None known.

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Keep away from sources of ignition - No smoking. Keep away from sources of ignition - No smoking.

11. TOXICOLOGICAL INFORMATION**ACUTE ORAL**

Remarks: No data available.

ACUTE DERMAL

Remarks: No data available.

ACUTE INHALATION

Remarks: No data available.

OTHER

Octamethylcyclotetrasiloxane

Ingestion: Rodents given large doses via oral gavages of Octamethylcyclotetrasiloxane (1600 mg/kg day, 14 days) developed increased liver weights relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appear normal) as well as hypertrophy (increased cell size).

Inhalation: In inhalation studies, laboratory rodents exposed to Octamethylcyclotetrasiloxane (300 ppm five days week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. Inhalation studies utilizing laboratory rabbits and guinea pigs showed no effects on liver weights. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents.

Range finding reproductive studies were conducted (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation) with Octamethylcyclotetrasiloxane (D4). Rats were exposed to 70 and 700 ppm. In the 700 ppm group, there was a statistically significant reduction in mean litter size and in implantation sites. No D4 related clinical signs were observed in the pups and no exposure related pathological findings were found.

Interim results from a two generation reproductive study in rats exposed to 500 and 700 ppm D4 (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation) resulted in a statistically significant decrease in live mean litter size as well as extended periods of off-spring delivery (dystocia). These results were not observed at the 70 and 300ppm dosing levels.

Preliminary results from an ongoing 24-month combined chronic/oncogenicity study in rats exposed to 10, 30, 150, or 700 ppm D4 showed test-article related effects in the kidney (male and female) and uterus of rats exposed for 12 to 24 months. These effects include increased kidney weight and severity of chronic nephropathy, increased uterine weight, increased incidence of endometrial cell hyperplasia, and an increased incidence of endometrial adenomas. All of these effects are limited to the 700 ppm exposure group.

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These results have been shown to be rat-specific. Further studies are ongoing.

In developmental toxicity studies, rats and rabbits were exposed to Octamethylcyclotetrasiloxane at concentrations up to 700 ppm and 500 ppm respectively. No teratogenic effects (birth defects) were observed in either study.

SENSITIZATION

No data available.

SKIN IRRITATION.

No data available.

EYE IRRITATION

No data available.

MUTAGENICITY

No data available.

12. ECOLOGICAL INFORMATION**DISTRIBUTION**

No data available.

CHEMICAL FATE

No data available.

13. DISPOSAL CONSIDERATIONS**DISPOSAL METHODS**

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT SHIPPING NAME:	Combustible liquid, n.o.s.(Naphtha)
DOT HAZARD CLASS:	CBL
DOT LABEL (S):	NON
UN/NA NUMBER:	NA 1993
PACKING GROUP:	III

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This product is considered flammable for transportation. It has been reclassified as combustible by ground transportation per 49CFR173.120(b)(2). This product must be classified as flammable when transported by vessel or aircraft.

15. REGULATORY INFORMATION**Inventories**

Australia Inventory of Chemical Substances (AICS)	y (positive listing)	
EU list of existing chemical substances	y (positive listing)	
Japan Inventory of Existing & New Chemical Substances (ENCS)	n (Negative listing)	
China Inventory of Existing Chemical Substances	y (positive listing)	
Korea Existing Chemicals Inventory (KECI)	y (positive listing)	
Canada DSL Inventory	y (positive listing)	
Canada NDSL Inventory	n (Negative listing)	
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	y (positive listing)	
TSCA list	y (positive listing)	On TSCA Inventory

For inventories that are marked as quantity restricted or special cases, please contact Momentive.

US Regulatory Information**SARA (311,312) HAZARD CLASS**

Acute Health Hazard; Fire Hazard

CALIFORNIA PROPOSITION 65

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

Canadian Regulatory Information**WHMIS CLASSIFICATION**

- Combustible liquid.

D2A - Very Toxic Material Causing Other Toxic Effects

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16. OTHER INFORMATION**OTHER**

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

,C = ceiling limit NEGL = negligible
EST = estimated NF = none found
NA = not applicable UNKN = unknown
NE = none established REC = recommended
ND = none determined V = recommended by vendor
SKN = skin TS = trade secret
R = recommended MST = mist
NT = not tested STEL = short term exposure limit
ppm = parts per million ppb = parts per billion
By-product= reaction by-product, TSCA inventory status not required under 40 CFR part 720.30(h-2).

