



SECTION 1 PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: PS#220 - Solvent-based 100% Silicone 69% Solids Elastomeric Roof Coating (FR)

Recommended Use: Silicone Roof Coating

Restriction on Use: None

Manufacturer:
KM Coatings Mfg.
5301 W. Mohave Street
Phoenix, AZ 85043
(602)-253-1168

SDS Date of Preparation: 11/16/17

Emergency Contact: (800) 424-9300 CHEMTREC (USA)

SECTION 2: HAZARDS IDENTIFICATION

Physical	Health
Flammable Liquid Category 3	Aspiration Hazard Category 1 Skin Irritation Category 2 Skin Sensitization Category 1B Specific Target Organ Toxicity – Single Exposure Category 3 (CNS) Specific Target Organ Toxicity – Repeated Exposure Category 2

Label Elements:

Danger!



Flammable Liquid and vapor.
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause an allergic skin reaction.
May cause drowsiness or dizziness.
May cause damage to blood through prolonged or repeated exposure by ingestion.

Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment
Use explosion-proof electrical, ventilating and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe the mist, vapors or spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.



Wear protective gloves, eye protection and face protection.

IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. Get medical attention if you feel unwell.

In case of fire: Use foam, dry chemical, carbon dioxide or water to extinguish.

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Dispose of contents and container in accordance with local and national regulations.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS#	WT.%
Crystalline Silica, quartz	14808-60-7	30-35%
Hydrotreated Light Petroleum Distillates	64742-47-8	10-20%
Titanium Dioxide	13463-67-7	5-10
Methyl Oximino Silane	22984-54-9	1-5
Carbon Black	1333-86-4	0.1-0.1

* The crystalline silica, titanium dioxide and carbon black in this product are inextricably bound in a manner that no exposure occurs during normal use and handling. Therefore this product is not classified as a carcinogen.

The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURES

Eyes: Flush with large quantities of water, holding the eyelids apart. Get medical attention if irritation develops.

Skin: Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. If irritation develops, get medical attention. Launder clothing before re-use.

Inhalation: Remove to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, administer artificial respiration. Get medical attention if symptoms develop or persist.

Ingestion: If conscious, rinse mouth with water. DO NOT induce vomiting. Never give anything by mouth to a person who is unconscious or convulsing. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. Get immediate medical attention.

Most important symptoms/effects, acute and delayed: May cause eye irritation. Causes skin irritation with redness, itching and dryness. May cause an allergic skin reaction. Inhalation of vapors or mists may cause upper respiratory tract irritation and central nervous system effects. Aspiration during swallowing or vomiting may cause lung damage. May cause damage to the blood through prolonged or repeated exposure by ingestion.

Indication of immediate medical attention and special treatment, if necessary: If large amounts are swallowed, get medical attention.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media: Use water, carbon dioxide, dry chemical or foam to extinguish fire. Do not use a water jet. Cool fire exposed containers with water.



Special Protective Equipment and Precautions for Fire-fighters: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.

Specific Hazards Arising from the Chemical: This product is flammable and may form explosive mixtures with air. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back. Closed containers may explode if exposed to extreme heat.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Wear appropriate protective clothing to avoid eye and skin contact.

Environmental precautions: Avoid release to the environment. Report releases as required by local, state and federal authorities.

Methods and Materials for Containment and Cleaning Up: Dike the spilled material. Attempt to reclaim the free product, if this is possible. Collect with an inert material and place into a closable container for disposal. Use non-sparking tools and equipment. Do not flush to sewer!

SECTION 7 HANDLING and STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin and clothing. Avoid breathing aerosols, mists and heated vapors. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep product away from heat, sparks, flames and all other sources of ignition. Do not permit smoking in use or storage areas. Use with non-sparking tools and explosion proof equipment. Electrically bond and ground containers for transfer.

Empty containers retain product residues can be hazardous. Follow all SDS precautions when handling empty containers.

Conditions for Safe Storage, Including any Incompatibilities: Store in a dry, well-ventilated area away from heat, direct sunlight and all sources of ignition. Store in a tightly closed container. Avoid storing above 100°F. Keep in original container.

SECTION 8 EXPOSURE CONTROLS and PERSONAL PROTECTION

Exposure Guidelines:

INGREDIENTS	EXPOSURE LIMITS
Crystalline Silica, Quartz	0.05 mg/m3 TWA OSHA PEL (respirable fraction) 0.025 mg/m3 TWA ACGIH TLV (respirable fraction)
Hydrotreated Light Petroleum Distillates	100 ppm TWA manufacturer recommended
Titanium Dioxide	15 mg/m3 TWA OSHA PEL (total dust) 10 mg/m3 TWA ACGIH TLV
Methyl Oximino Silane	None Established
Carbon Black	3.5 mg/m3 TWA OSHA PEL 3 mg/m3 TWA ACGIH TLV (inhalable fraction)

Appropriate Engineering Controls: Use with adequate local exhaust ventilation to maintain exposures below the occupational exposure limits. Use explosion proof equipment where required.

Respiratory Protection: None normally required. If the exposures the product is heated or sprayed, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.



Gloves: Impervious gloves are recommended to prevent skin contact.

Eye Protection: Chemical safety goggles recommended if contact is possible.

Other Protective Equipment: Impervious clothing as needed to prevent contact.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

Appearance And Odor: Colored viscous liquid with a petroleum odor.

Boiling Point (@ 760 mmHg): 310-385°F / 154.4-196.1°C	Freezing Point: Not available
Odor Threshold: Not available	Viscosity: Not available
Relative density (H₂O=1): 1.23	Vapor Pressure: Not available
VOC: <250 g/L	Vapor Density (AIR=1): >1
Evaporation Rate: Slower than ether	Solubility In Water: Negligible
pH: Not available	Partition Coefficient n-Octanol/Water: Not determined
Flash Point: >108°F / >42.2°C COC	Autoignition Temperature: Not available
Decomposition Temperature: Not available	Flammability (solid, gas): Not applicable
Flammable Limits: (vol % in air)	LEL – N/A UEL – N/A

SECTION 10 STABILITY and REACTIVITY

Reactivity: Not normally reactive.

Chemical Stability: Stable under normal storage and handling conditions

Possibility of Hazardous Reactions: None known

Conditions to avoid: Excessive heat.

Incompatible materials: Avoid strong oxidizing agents, acids, halogens and molten sulfur.

Hazardous decomposition products: Thermal decomposition may yield oxides of carbon and nitrogen and hydrocarbons.

SECTION 11 TOXICOLOGICAL INFORMATION

Eye: Contact may cause irritation with redness, pain and tearing.

Skin: Skin contact may cause irritation with redness, itching and drying of the skin.

Inhalation: Inhalation of vapors or mists may cause mucous membrane and upper respiratory irritation, headache, dizziness, drowsiness, weakness, fatigue and central nervous system effects.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea and diarrhea. Aspiration during swallowing or vomiting may cause lung damage.

Sensitization: Methyl oximino silane was positive in a guinea pig maximization test.

Chronic Effects: Methyl oximino silane has been shown to cause damage to the blood in studies with laboratory animals.

Carcinogenicity: Crystalline silica quartz is listed as "Carcinogenic to Humans" (Group 1) by IARC and "Known to be a Human Carcinogen" by NTP. Carbon black and titanium dioxide are classified by IARC as "Possibly Carcinogenic to Humans", Group 2B. The crystalline silica, quartz, carbon black and titanium dioxide are inextricably bound and no exposure occurs during use. None of the other components present at 0.1% or greater are listed as a carcinogen by NTP, IARC, ACGIH or OSHA.

Numerical Measures of Toxicity:

Crystalline Silica, Quartz: Oral rat LD₅₀ >22,500 mg/kg

Hydrotreated Light Petroleum Distillates: Oral rat LD₅₀ > 5000 mg/kg; Inhalation rat LC₅₀ > 5.28 mg/L/4 hr; Dermal rabbit LD₅₀ > 2000 mg/kg

Titanium Dioxide: Oral rat LD₅₀ >5000 mg/kg, Inhalation rat LC₅₀ >6.82 mg/L/4 hr

Methyl Oximino Silane: Oral rat LD₅₀ 2463 mg/kg, Dermal rat LD₅₀ >2000 mg/kg

Carbon Black: Oral rat LD₅₀ > 8000 mg/kg, Inhalation rat LC₅₀ > 4.6 mg/m³/4 hr.



SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Crystalline Silica: 72 hr LC50 carp >10,000 mg/L
Hydrotreated Light Petroleum Distillates: 96 hr LC50 Oncorhynchus mykiss 2 mg/L; 48 hr EC50 Daphnia magna EC50 1.4 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 1 mg/L
Titanium Dioxide: 96 hr LC50 Pimephales promelas >1000 mg/L, 48 hr EC50 daphnia magna >1000 mg/L, 72 hr EC50 Pseudokirchneriella subcapitata 61 mg/L
Methyl Oximino Silane: 96 hr EC50 Oncorhynchus mykiss >120 mg/L, 48 hr EC50 daphnia magna >120 mg/L, 72 hr EC50 Pseudokirchneriella subcapitata 94 mg/L
Carbon Black: 96 hr LC0 Danio rerio 1000 mg/L, 24 hr EC50 daphnia magna > 5600 mg/L, EC50 Desmodesmus subspicatus > 10000 mg/L

Persistence and degradability: Biodegradation is not applicable to inorganic substances such as crystalline silica, quartz.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with all local, state and federal regulations.

SECTION 14: TRANSPORT INFORMATION

DOT/TDG (Non-Bulk): Not regulated (if shipped in NON BULK package, (119 gallon or less) by ground)

DOT:	If shipped in containers greater than 119 gallons (1190 lbs)
UN/ID Number	UN1268
Proper Shipping Name	Petroleum Distillates, n.o.s
Hazard Class	3
Packing Group	III
ERG Code	128
DOT Special Provisions	144, B1, IB3, T4, TP1
Description	UN1268, Petroleum Distillates, n.o.s. 3, III

TDG:	If shipped in containers greater than 119 gallons (1190 lbs)
UN/ID Number	UN1268
Proper Shipping Name	Petroleum Distillates, n.o.s
Hazard Class	3
Packing Group	III
ERG Code	128
TDG Special Provisions	91, 92, 150
Description	UN1268, Petroleum Distillates, n.o.s. 3, III, FP=42.2C

IATA:	
UN/ID Number	UN1268
Proper Shipping Name	Petroleum Distillates, n.o.s
Hazard Class	3
Packing Group	III
ERG Code	3L



Special Provisions 3L
Description UN1268, Petroleum Distillates, n.o.s. 3, III

IMDG:

UN/ID Number UN1268
Proper Shipping Name Petroleum Distillates, n.o.s
Hazard Class 3
Packing Group III
EmS-No F-E, S-E
Special Provisions 223, 955
Description UN1268, Petroleum Distillates, n.o.s. 3, III, Marine Pollutant, FP=42.2C

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known

SECTION 15: REGULATORY INFORMATION

SARA Hazard Category (311/312): See OSHA Hazard Classification in Section 2.

EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313: None

CERCLA Hazardous Substances (Section 103)/RQ: This product is not subject to CERCLA reporting requirements as it is sold. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act: All of the components of this product are listed on the TSCA inventory.

California Proposition 65: This product contains the following chemical known to the State of California to cause cancer or reproductive toxicity: none – crystalline silica, quartz, titanium dioxide and carbon black is inextricably bound

SECTION 16: OTHER INFORMATION

NFPA Rating:	Health = 2	Fire = 2	Instability = 0
HMIS Rating:	Health = 2	Fire = 2	Physical Hazard = 0

SDS Date of Preparation: 11/3/17

Revision Summary: Header, Section 14 Transportation, Section 15 SARA 311/312, Canadian WHMIS classification

NOTICE

The information contained herein is based upon the data available to us and is believed to be accurate. However, KM Coatings Mfg. makes no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. KM Coatings Mfg. assumes no responsibility for injury from the use of the products described herein.

This MSDS conforms with the OSHA Hazard Communication Standard 1900.1210 and to SARA Title III, Section 313 for supplier notification.