

MATERIAL SAFETY DATA SHEET



SECTION 1 - PRODUCT AND COMPANY INFORMATION

PPG/Monarch Paint
3530 Lang Road
Houston, TX 77092

EMERGENCY PHONE NUMBERS (412) 434-4515 (U.S.)
(24 hours/day):

(514) 645-1320 (Canada)
01-800-00-21-400 (Mexico)
0532-3889090 (China)

TECHNICAL INFORMATION: (713) 681-1868

PRODUCT SAFETY/MSDS INFORMATION: (412) 492-5555 7:00 a.m. - 4:30 p.m. EST

Product ID: MKMS-91097 (0877)
PRODUCT NAME: MOPAKO I/F NEWMARK KNUBBY
SYNONYMS: None
ISSUE DATE: 07/08/2005
EDITION NO.: 2
CHEMICAL FAMILY: Acrylic

EMERGENCY OVERVIEW:
CAUSES EYE IRRITATION. MAY CAUSE SLIGHT SKIN IRRITATION. VAPOR AND/OR SPRAY MIST MAY BE HARMFUL IF INHALED. HARMFUL IF SWALLOWED. This product is not expected to present any unusual hazards under fire or spill conditions. Read entire MSDS before use.

SECTION 2 - COMPOSITION INFORMATION

The following ingredient(s) marked with an "x" are considered hazardous under applicable U.S. OSHA and/or Canadian WHMIS regulations. If no ingredients are listed, then there are no U.S. OSHA and/or Canadian WHMIS hazardous ingredients in this product.

Material/ CAS Number	Percent	Hazardous	
CALCIUM CARBONATE 1317-65-3	15 - 40	X	
TITANIUM DIOXIDE 13463-67-7	5 - 10	X	
ALUMINUM SILICATE 1332-58-7	1 - 5	X	
ETHYLENE GLYCOL 107-21-1	1 - 5	X	
QUARTZ 14808-60-7	0.1-1.0	X	
(As Silica, crystalline and Quartz) 14808-60-7	*	X	See Sections 8 and 15 for information.
(As Nuisance Particulates) 1332-58-7	*	X	See Sections 8 and 15 for information.
(Titanium and Titanium Cmpnds) 13463-67-7	*	X	See Sections 8 and 15 for information.
(Titanium in Titanium Cmpnds) 13463-67-7	*	X	See Sections 8 and 15 for information.

SECTION 3 - HAZARDS IDENTIFICATION

ACUTE OVEREXPOSURE EFFECTS

EYE CONTACT:
Causes eye irritation. Redness, itching, burning sensation and visual disturbances may indicate excessive eye contact.

SKIN CONTACT:

May cause slight skin irritation. Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

SKIN ABSORPTION:

Skin absorption not expected to occur.

INHALATION:

Vapor and/or spray mist may be harmful if inhaled.

INGESTION:

Harmful if swallowed.

SIGNS & SYMPTOMS OF OVEREXPOSURE:

Dryness, itching, cracking, burning, redness, and swelling are conditions associated with excessive skin contact.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Not applicable.

CHRONIC OVEREXPOSURE EFFECTS

Avoid long-term and repeated contact.

This product contains crystalline silica which has been classified as a human carcinogen by IARC. Long-term exposures may also lead to a disabling lung condition known as silicosis. The risk depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Use of appropriate personal protective equipment and/or engineering controls should be employed whenever these types of operations are being performed.

The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures. See Section 11, of this MSDS for a detailed list of chronic health effects information available on individual ingredients in this product.

SECTION 4 - FIRST AID MEASURES

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available.

EYE CONTACT:

Remove contact lens and pour a gentle stream of warm water through the affected eye for at least 15 minutes. If irritation persists, contact a poison control center, emergency room, or physician as further treatment may be necessary.

SKIN CONTACT:

Run a gentle stream of water over the affected area for 15 minutes. A mild soap may be used if available. If any symptoms persist, contact a poison control center, emergency room, or physician as further treatment may be necessary.

INHALATION:

Remove from area to fresh air. If symptomatic, contact a poison control center, emergency room or physician for treatment information.

INGESTION:

Gently wipe or rinse the inside of the mouth with water. Sips of water may be given if person is fully conscious. Never give anything by mouth to an unconscious or convulsing person. Do Not induce vomiting. Contact a poison control center, emergency room or physician right away as further treatment will be necessary.

SECTION 5 - FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASHPOINT: >200 Degrees F (> 93 Degrees C)

FLASHPOINT TEST METHOD:

Pensky-Martens Closed Cup

UEL: Not Available.

LEL: Not Available.

AUTOIGNITION TEMPERATURE:

Not Available.

EXTINGUISHING MEDIA:

Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or universal aqueous film forming foam) designed to extinguish NFPA Class IIIB combustible liquid fires.

PROTECTION OF FIREFIGHTERS:

Water spray may be ineffective. Water spray may be used to cool closed containers that are exposed to extreme heat. If water is used, fog nozzles are preferable. Firefighters should wear self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Closed containers may explode or burst (due to the build-up of steam pressure) when exposed to extreme heat. May produce hazardous decomposition products when exposed to extreme heat. Extreme heat includes, but is not limited to, flame cutting, brazing, and welding.

SECTION 6 - ACCIDENTAL RELEASE MEASURE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbant should be placed in this container.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORAGE:

If this material is part of a multiple component system, read the Material Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.

STORAGE:

Protect from freezing.

SECTION 8 - EXPOSURE CONTROLS & PERSONAL PROTECTION

ENGINEERING CONTROLS:

Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 8 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

PERSONAL PROTECTIVE EQUIPMENT

EYES:

Wear safety glasses with side shields.

SKIN/GLOVES:

Wear protective clothing. Gloves should be constructed of: neoprene rubber or nitrile rubber. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on infrequent contact with this product. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment. Clean contaminated clothing and shoes.

RESPIRATOR:

Where ventilation is inadequate, use a NIOSH- approved air purifying respirator with the appropriate chemical cartridges or positive- pressure, air-supplied respirator. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used. Provide general dilution or local exhaust ventilation in volume and pattern to keep the concentration of ingredients listed in Section 2 below the lowest suggested exposure limits, the LEL below the stated limit, and to remove decomposition products during welding or flame cutting.

GENERAL HYGIENE - ESTABLISHED EXPOSURE LIMITS

If Threshold Limit Values (TLVs) have been established by ACGIH, OSHA, Ontario or PPG, they will be listed below. These limits are

intended for use in the practice of industrial hygiene as guidelines or recommendations in the control of potential workplace health hazards. These limits are not a relative index of toxicity and should not be used by anyone without industrial hygiene training.

Material/ CAS Number	Percent	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL
CALCIUM CARBONATE 1317-65-3	15 - 40	Not established	Not established	R- 5 mg/m ³	Not established
TITANIUM DIOXIDE 13463-67-7	5 - 10	10 mg/m ³	Not established	10 mg/m ³	Not established
ALUMINUM SILICATE 1332-58-7	1 - 5	R- 2 mg/m ³	Not established	R- 5 mg/m ³	Not established
ETHYLENE GLYCOL 107-21-1	1 - 5	C_ 100 mg/m ³	Not established	C- 50 ppm	Not established
QUARTZ 14808-60-7	0.1-1.0	R- 0.05 MG/m ³	Not established	R- 0.1 mg/m ³	Not established
(As Silica, crystalline and Quartz) 14808-60-7	*	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB
(As Nuisance Particulates) 1332-58-7	*	R- 3 MG/m ³	NOT ESTAB	R- 5 mg/m ³	NOT ESTAB
(Titanium and Titanium Cmpnds) 13463-67-7	*	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB
(Titanium in Titanium Cmpnds) 13463-67-7	*	NOT ESTAB	NOT ESTAB	NOT ESTAB	NOT ESTAB

Key: OSHA=Occupational Safety and Health Administration;
PEL=Permissible Exposure Limit; Ceiling=PEL Ceiling Limit; STEL=PEL
Short-Term Exposure Limit; Skin=OSHA Skin Designation.

Material/ CAS Number	Percent	Ontario TWA	Ontario STEL	PPG IPEL	PPG STEL
CALCIUM CARBONATE 1317-65-3	15 - 40	10 MG/m ³	Not established	Not established	Not established
TITANIUM DIOXIDE 13463-67-7	5 - 10	10 mg/m ³	Not established	Not established	Not established
ALUMINUM SILICATE 1332-58-7	1 - 5	R- 2 MG/m ³	Not established	Not established	Not established
ETHYLENE GLYCOL 107-21-1	1 - 5	C- 100 MG/m ³	Not established	Not established	Not established
QUARTZ 14808-60-7	0.1-1.0	0.10 MG/m ³	Not established	Not established	Not established
(As Silica, crystalline and Quartz) 14808-60-7	*	NOT ESTAB	NOT ESTAB	Not established	Not established
(As Nuisance Particulates) 1332-58-7	*	R- 10 MG/m ³	NOT ESTAB	Not established	Not established
(Titanium and Titanium Cmpnds) 13463-67-7	*	NOT ESTAB	NOT ESTAB	Not established	Not established
(Titanium in Titanium Cmpnds) 13463-67-7	*	NOT ESTAB	NOT ESTAB	Not established	Not established

Key: ACGIH=American Conference of Governmental Industrial Hygienists; OSHA=Occupational Safety and Health Administration; TLV=Threshold Limit Value; TWA=Time Weighted Average; PEL=Permissible Exposure Limit; IPEL=Internal Permissible Exposure Limit; Ceiling=TLV or PEL Ceiling Limit; STEL=TLV or PEL Short-Term Exposure Limit; Skin= Skin Absorption Designation. [C- Ceiling Limit; S-Potential Skin Absorption; R-Respirable Dust]
Additional Information Not applicable.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES
(FORMULA VALUES, NOT SALES SPECIFICATIONS)

SPECIFIC GRAVITY: 1.548
PHYSICAL STATE: Liquid
Percent Solids: 61.89
Percent Volatile by Volume: 58.810
pH: Not available.
ODOR THRESHOLD: Not available.
Vapour Pressure: 17.2 mmHg
ODOR/APPEARANCE: Viscous liquid with an odor characteristic of the chemical family and any solvents listed in Section 2.
VAPOR DENSITY: HEAVIER THAN AIR
Evaporation Rate: 34
BOILING POINT OR RANGE: 212 - 471Degrees F
Freezing Point or Range: Not Applicable.
Melting Point or Range(°C): Not Applicable.
Partition coefficient (n-octanol/water): Not Applicable.
WEIGHT PER GALLON: 12.90 (U.S.)/ 15.4 (IMPERIAL)

SECTION 10 - STABILITY AND REACTIVITY

STABILITY:
This product is normally stable and will not undergo hazardous reactions.
CONDITIONS TO AVOID:
None Known.
INCOMPATIBLE MATERIALS:
Avoid contact with strong alkalis, strong mineral acids, or strong oxidizing agents.
HAZARDOUS POLYMERIZATION:
None Known.
HAZARDOUS DECOMPOSITION PRODUCTS:
- Carbon monoxide - Carbon dioxide - Oxides of aluminum - Lower molecular weight polymer fractions

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Material/ CAS Number	Percent	ORAL LD50 (g/kg)	DERMAL LD50 (g/kg)	INHALATION LC50 (mg/l)
ETHYLENE GLYCOL 107-21-1	1 - 5	4.70 g/kg	9.53 g/kg	Not Available

CHRONIC TOXICITY

Target Organs:
- Embryotoxin - Kidney - Liver - Carcinogen - Lung

Mutagenicity Toxicity:
This has not been tested for this product.

Reproductive Toxicity:
This has not been tested for this product.

SUPPLEMENTAL HEALTH INFORMATION:

Material/ CAS Number	Percent	Ingredient Specific Animal Data:
TITANIUM DIOXIDE 13463-67-7	5 - 10	This product contains titanium dioxide. Animals inhaling massive quantities of titanium dioxide dust in a long-term study developed lung tumors. Studies with humans involved in manufacture of this pigment indicate no increased risk of cancer from exposure.
ETHYLENE GLYCOL 107-21-1	1 - 5	Ingestion of products containing ethylene glycol may damage kidneys and liver and has been shown to cause birth defects in laboratory animals.

SECTION 12 - ECOLOGICAL INFORMATION

POTENTIAL ENVIRONMENTAL EFFECTS

Ecotoxicity: No Information Available.

ENVIRONMENTAL FATE

Mobility: No Information Available.
Biodegradation: No Information Available.
Bioaccumulation: No Information Available.

PHYSICAL/CHEMICAL

Hydrolysis: No information available
Photolysis: No information available

SECTION 13 - DISPOSAL CONSIDERATIONS

Provide maximum ventilation, only personnel equipped with proper respiratory and skin and eye protection should be permitted in the area. Take up spilled material with sawdust, vermiculite, or other absorbent material and place in containers for disposal.
Waste material must be disposed of in accordance with federal, state, provincial and local environmental control regulations. Empty containers should be recycled by an appropriately licensed reconditioner/salvager or disposed of through a permitted waste management facility. Additional disposal information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

SECTION 14 - TRANSPORTATION INFORMATION

Proper Shipping Name: Paint- Non-Regulated Goods
NOS Technical Name: None
Hazard Class: None
Subsidiary Class(es): None
UN Number: None
Packing Group: None

USA - RQ Hazardous Substances: None
USA-RQ Hazardous Substance None
Threshold Ship Weight:
Marine Pollutant Name: None

SECTION 15 - REGULATORY INFORMATION

INVENTORY STATUS

U.S. TSCA: This product and/or all of its components are listed on the U.S. TSCA Inventory or is otherwise exempt from TSCA Inventory reporting requirements.

FEDERAL REGULATIONS
US Regulations

**PPG/Monarch Paint
3530 Lang Road
Houston, TX 77092**

Product ID: MKMS-91097 (0877)
PRODUCT NAME: MOPAKO I/F NEWMARK KNUBBY

<u>Material/ CAS Number</u>	<u>Percent</u>	<u>CERCLA HS - RQ (LBS)</u>	<u>SARA EHS- TPQ (LBS)</u>	<u>SARA 313</u>
CALCIUM CARBONATE 1317-65-3	15 - 40	Not Listed	Not Listed	Not Listed
TITANIUM DIOXIDE 13463-67-7	5 - 10	Not Listed	Not Listed	Not Listed
ALUMINUM SILICATE 1332-58-7	1 - 5	Not Listed	Not Listed	Not Listed
ETHYLENE GLYCOL 107-21-1	1 - 5	5000 LBS	Not Listed	Listed
QUARTZ 14808-60-7	0.1-1.0	Not Listed	Not Listed	Not Listed
(As Silica, crystalline and Quartz) 14808-60-7	*	NOT ESTAB	NOT ESTAB	Not Listed
(As Nuisance Particulates) 1332-58-7	*	NOT ESTAB	NOT ESTAB	Not Listed
(Titanium and Titanium Cmpnds) 13463-67-7	*	NOT ESTAB	NOT ESTAB	Not Listed
(Titanium in Titanium Cmpnds) 13463-67-7	*	NOT ESTAB	NOT ESTAB	Not Listed

HMIS=Hazardous Materials Identification System; NFPA=National Fire Protection Association;

Safe handling of this product requires that all of the information on the MSDS be evaluated for specific work environments and conditions of use.

PREPARED BY: Product Safety Department
REASON FOR REVISION: Section 8 has been updated. Section 15 has been updated. Section 2 has been updated. Changes to this section may also result in changes in sections 8, 11 and/or 15. Section 9 has been updated. Date. Edition.
Updated MSDS format.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200), the supplier notification requirements of SARA Title III, Section 313 and other applicable right-to-know regulations.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

MKMS-91097000005 (00351541.002)(07/08/05)
050706, 000, 0877

*** END OF MSDS ***

SARA 311/312

Health (acute): Yes
Health (chronic): Yes
Fire (flammable): No
Pressure: No
Reactivity: No

WHMIS HAZARD CLASS: - Class D, Division 2, Subdivision A

STATE/PROVINCIAL REGULATIONS

CALIFORNIA PROP. 65: WARNING: This product contains a chemical known to the State of California to cause cancer.

Additional Information

<u>Material/ CAS Number</u>	<u>Percent</u>	<u>IARC Group 1(Kno wn Human Carc.)</u>	<u>IARC Group 2A (Proba ble Carc.)</u>	<u>IARC 2B (Suspec ted Carc.)</u>	<u>ACGIH Carc.</u>	<u>NTP Known Carc.</u>	<u>OSHA Carc.</u>
QUARTZ 14808-60-7	0.1-1.0	Y	N	N	Y	N	Y

Key: IARC- International Agency on the Research of Cancer; ACGIH- American Conference of Governmental Industrial Hygienists; NTP- National Toxicology Program *Denotes chemical as NTP Known Carcinogen; + Denotes NTP Possible Carcinogen; OSHA- Occupational Safety and Health Administration.

SECTION 16 - OTHER INFORMATION

Hazard Rating Systems

NFPA Rating: 1 10

HMIS Rating: 1*10

Rating System: 0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe, *=Chronic Effects.