MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Manufacturer
U.S. PLY, INC.
P.O. Box 11740
Fort Worth, TX 76104

Non-Emergency Information
Telephone: U.S. PLY, INC. (866) 787-4759 or (817) 413-0103

Emergency Information
Transportation Emergency Telephone: 1-800-424-9300

Product Name: USP BLEEDBLOCK, USP ENERGYBASE, USP ENERGYSIL SP BASE COAT, USP ENERGYBRITE, USP ENERGYKOTE, USP ENERGYMAX, USP ULTRASTAR HI-REFLECT ROOF COATING

Product Use: Acrylic Roof Coating

SECTION 2 – COMPOSITION (INFORMATION OF INGREDIENTS)

Reportable Components	CAS Number	Weight Percent (+/-2%)
Calcium Carbonate	471-34-1	19-36
Titanium Dioxide	13463-67-7	7-12

SECTION 3 – HAZARDS IDENTIFICATION

Physical Hazards:
APPEARANCE AND ODOR: White or light grey viscous liquid.

No severe or acute health hazards are known to be associated with the use of this product. Avoid inhalation of heated vapors or spray mists. Common irritation symptoms-headache, nausea, nose and throat irritation-may result from overexposure.

Potential Health Effects:
May aggravate pre-existing respiratory and skin disorders.

Exposure Routes:

Primary: Inhalation, skin contact and eye contact.

Inhalation: Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts may cause overexposure symptoms, such as headache, nausea, and irritation of nose and throat.

Skin Contact: Exposure causes skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking.

Absorption: Skin absorption is possible, but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

Eye Contact: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness and swelling.

Ingestion: Swallowing small amounts of this product during normal use. It is not likely to cause any adverse health effects. Ingestion of larger amounts can result in corrosive action in the mouth, stomach tissue and digestive tract. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.

Read the entire MSDS for a more thorough assessment to the hazard information on this product.

SECTION 4 – FIRST AID MEASURES

General: In case of accident or if you feel unwell, seek medical advice IMMEDIATELY. (Show the product label where possible)

Inhalation: Remove victim from exposure to well ventilated area. If breathing is labored, qualified personnel should administer oxygen. Apply artificial respiration if breathing has ceased or shows signs of failing.

Skin Contact: Remove contaminated clothing. Immediately wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice. Contaminated clothing should be thoroughly cleaned before reuse.

Eye Contact: Immediately flush eyes running water for a minimum of 15 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY.

Ingestion: Do NOT induce vomiting. Provided the patient is conscious, wash out mouth with water then give 1 or 2 glasses of water to drink. Refer person to medical personnel for immediate attention.

Note to Physicians: Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

SECTION 5 – FIRE-FIGHTING MEASURES

Flash Point**:** N/A

Flammable Limits In Air by Volume:

USP BleedBlock	= (Lower): N/A	(Upper): N/A
USP EnergyBase	= (Lower): N/A	(Upper): N/A
USP EnergySil SP-Base	= (Lower): N/A	(Upper): N/A
USP EnergyBrite	= (Lower): N/A	(Upper): N/A
USP EnergyKote	= (Lower): N/A	(Upper): N/A
USP EnergyMax	= (Lower): N/A	(Upper): N/A
USP UltraStar	= (Lower): N/A	(Upper): N/A

Extinguishing Media: Use foam, dry chemical, CO_2, or water.

Fire Fighting Procedures: As appropriate for surrounding materials/equipment. If electrical equipment is involved, the use of foam should be avoided. No unusual fire or explosion hazards.

Fire Fighting Protective Equipment: Wear self-contained breathing apparatus with a full-face piece operated in the positive pressure demand mode when fighting fires.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

For major spills call CHEMTREC (800-424-9300).

Spills, Leaks, or Releases: Remove all sources of ignition. Ventilate area. Absorb spill with an absorbent material such as sawdust, vermiculite or sand, and place in a closed container. In case of large spill, dike the area to prevent this material from entering water systems or sewers.

SECTION 7 – HANDLING AND STORAGE

Handling: Avoid breathing aerosols, mists and vapors. Avoid prolonged or repeated skin contact (See Section 8—Exposure Control for details)

Storage Requirements: Keep containers properly sealed and when stored indoors, in a well-ventilated area.

Storage Temperature: Avoid storage above 100˚F. **Do not freeze**.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Read all product instructions before using. Personal protective equipment should include safety eye wear, fire resistant gloves, and long sleeve work clothes to prevent excessive skin contact. No special ventilation systems are required under normal conditions of use in well ventilated areas.

Exposure Guidelines	OSHA	ACGIH
Calcium Carbonate (471-34-1)	Total Dust 15 mg/m³ TWA Respirable Dust: 5 mg/m³	Total Dust 10 mg/m³ TWA Respirable Dust: 5 mg/m³
Titanium Dioxide (13463-67-7)	Total Dust 10 mg/m³ TWA Respirable Dust: 5 mg/m³	Total Dust 10 mg/m³ TWA Respirable Dust: 5 mg/m³

None of the components in this product are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

PREVENTATIVE MEASURES:
Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Work/Hygienic Practices: Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before reuse. Shower after work, using plenty of soap and water. Open containers of food and beverage should be kept away from areas where the product is used or stored. Eating, drinking, smoking and application of cosmetics should be prohibited in areas where the product is being used.

Engineering Controls: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s). General ventilation is recommended. Additional local exhaust ventilation is recommended where vapors, mists, or aerosols may be released. For guidance on engineering control measures refer to publications such as the ACGIH current edition of "Industrial Ventilation, a manual of Recommended Practice."

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also permit other types of safety glasses. (Consult your safety equipment supplier)

Skin Protection: Wear protective clothing to prevent skin contact. Keep exposed skin area to a minimum. Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH. Eye wash station and safety shower should be available.

Respiratory Protection: This product has demonstrated no observable effects at room temperature; however, it is highly recommended that an air-purifying respirator with organic filter cartridges be worn. In addition, in any interior, confined space, spray application, a supplied air source must be provided. When the product is sprayed or heated without adequate ventilation, an approved MSHA/NIOSH positive-pressure, supplied-air respirator may be required. Air purifying respirators equipped with organic vapor cartridges and a Hepa (P100) particulate filter may be used under certain conditions when a cartridge change-out schedule has been developed in accordance with the OSHA preparatory protection standard (29 CFR. 1910.134).

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in the work area.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Viscous liquid
Flash Point: N/A
Vapor Density (Air=1): Heavier than air
Boiling Point: 212˚F - 213˚F (100˚C)
Solubility (Water): Soluble
VOC: < 50 grams / liter
Specific Gravity: USP BleedBlock = 1.38; USP EnergyBase = 1.42; USP EnergySil SP-Base = 1.26; USP EnergyBrite = 1.44; USP EnergyKote = 1.42; USP EnergyMax = 1.30; USP UltraStar = 1.30

Evaporation Rate: Slower than Ether
pH: 8.5 – 9.0

SECTION 10 – STABILITY AND REACTIVITY

Hazardous Decomposition Products:
By fire: Carbon Dioxide, Carbon Monoxide.

Chemical Stability:
Stable at room temperature.

Conditions to Avoid:
Avoid freezing.

Incompatibility:
None Known

Hazardous Polymerization:
Will not occur

SECTION 11 – TOXICOLOGICAL INFORMATION

Potential Health Effects: May aggravate pre-existing respiratory and skin disorders.

Calcium Carbonate: Cas No. 471-34-1: LC50 Rat 4HR; LD50 Rat

Titanium Dioxide: Cas No. 13463-67-1: LC50 Rat 4HR; LD50 Rat

Inhalation: Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts may cause overexposure symptoms, such as headache, nausea, and irritation of nose and throat.

Skin Contact: Exposure causes skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking. Skin adsorption is possible, but harmful effects are not expected from this route of exposure under normal conditions of handling and use.

Eye Contact: Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness and swelling.

Ingestion: Swallowing small amounts of this product during normal use is not likely to cause any adverse health effects. Ingestion of larger amounts can result in corrosive action in the mouth, stomach tissue and digestive tract. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.

Carcinogenicity: The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP.

SECTION 12 – ECOLOGICAL INFORMATION

No data available

SECTION 13 – DISPOSAL CONSIDERATIONS

Liquid waste must be disposed of in accordance with Federal, State and local regulations. Incineration is the preferred method. In its cured (solid) form, this product is considered non-hazardous, and can usually be land filled. For further information contact your state or local solid waste agency or the United States Environmental Protection Agency's RCRA Hotline (1-800-434-9300). Chemical waste, even small quantities should never be poured down drains, sewers or waterways. Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

SECTION 14 – TRANSPORT INFORMATION

DOT: Not Regulated
Transportation Emergency Telephone Number: 1-800-424-9300 (CHEMTREC)

SECTION 15 – OTHER INFORMATION

TSCA (Toxic Substances Control Act) Regulations: This material or its components are listed on the TSCA Chemical Substance Inventory and is in compliance with all applicable rules and orders. One or more of the components may be exempt from listing on the TSCA Inventory.

NFPA: Health 1; Flammability 0; Reactivity 0

HMIS: Health 1; Flammability 0; Reactivity 0; Protection X