



MATERIAL SAFETY DATA SHEET

HMIS
 H = 1
 F = 1
 R = 0
 PPE = See Section 8

Section I

Manufacturer: Siplast, an Icopal Group Company
 (800) 643-1591 or (800) 922-8800
Address: 1000 E. Rochelle Blvd., Irving, TX 75062
Emergency Phone No.: CHEMTREC, (800) 424-9300 (U.S.), (703) 527-3887 (outside of U.S.)
Product Class: Asphalt Aggregate Roof Fill
Trade Name: Paraslope
Chemical Names and Family: Expanded Vermiculite Magnesium-Alumino-silicate Mineral and Asphalt
Product Use: Slope Correction Accessory
Formula: $(Mg,CA,K,Fe^{+2})_3(Si,A1,Fe^{+3})_4O_{10}(OH)_2 \cdot H_2O$
CAS # (Chemical Abstract Service): Mixture

Section II - Ingredients

Ingredient	NTP/IRAC OSHA CARC.	Percent	ACGIH TLV mg/m ³	OSHA PEL
Asphalt (Fumes) CAS #8052-42-1	NO	40-60	0.5	5 mg/m ³
Expanded Vermiculite Respirable Dust CAS #0138-00-9	NO	40-60	0.1	5 mg/m ³
Total Dust	NO		10	15 mg/m ³

Section III - Physical Data

Boiling Range of Asphalt: Minimum 750°F
 Evaporation Rate (Butyl Acetate = 1): Not applicable
 % Volatile by Volume: Not applicable
 Vapor Pressure (mm Hg.): Not applicable
 Vapor Density (AIR =1): Not applicable
 Solubility in Water: Negligible
 Bulk Density (lb./cu. ft): 8, 9, 5
 Appearance and Odor: Brown or black free flowing aggregate with slight earthy odor.
 Odor Threshold: None determined
 pH: Not applicable

Section IV - Fire and Explosion Data

Flash Point: 500°F Minimum (COC)
 Extinguishing Media: foam, carbon dioxide, dry chemicals, water.
 Special Procedures: The use of self-contained breathing apparatus is recommended for fire fighters. Cool exposed containers with water.
 Unusual Hazards: Combustible - Do not store near strong oxidants or open flame.

Section V - Health Hazard Data

This product is not considered a carcinogen. While OSHA does not require labeling of this product, good hygiene should be practiced when handling any petroleum product. The International Agency for Research on Cancer (IARC) states that there is inadequate evidence that petroleum bitumens alone are carcinogenic to humans. However, it states that extracts of steam-refined petroleum bitumens, and pooled mixtures of steam and air-refined petroleum bitumens have caused tumors in experimental animals (mice) when painted on the animals frequently over long periods of time.

Summary of Risks: This product is an irritant, skin and eye hazard and is toxic.
 Target Organs: Blood, nervous system, lungs, and kidneys.

Effects of Overexposure:

SKIN: Prolonged or repeated contact may cause slight irritation.

EYES: Contact may cause irritation, redness, blurred vision.

INHALATION: Excessive breathing of fumes from molten asphalt can cause nasal and respiratory irritation, dizziness, nausea, and headache.

Routes of Exposure:

INHALATION: Dust that may be released in handling may cause symptoms typical of nuisance dusts, including coughing, sneezing, and minor upper respiratory irritation.

SKIN AND EYES: Direct eye contact may cause minor physical or mechanical irritation. Skin contact is not expected to cause any harmful effects.

INGESTION: Not considered harmful by ingestion.

Carcinogenicity According to NTP, IARC and OSHA: Not applicable (See Section 8)

Section VI - Reactivity Data

Stability: Stable X Unstable _____

Conditions to Avoid: Strong oxidants

Hazardous Decomposition or Byproducts: H₂S released when heated.

Hazardous Polymerization:

May occur _____ Will not occur X

Section VII

Spill & Disposal Information - U.S. Only

Observing the above precautions, sweep up or shovel spilled material and place in suitable containers for recycle or disposal. Discard empty packaging promptly.

According to EPA (40 CFR 261.3) waste of this product is not defined as hazardous. Dispose of all waste in accordance with federal, state, and local regulations.

Section VIII - Special Protection Information

Warning Statements:

CAUTION! MAY CAUSE SLIGHT IRRITATION.

Product contains vermiculite CAS # 1318-00-9 and other associated minerals, including quartz CAS # 14808-60-7. (See information in Work/Hygienic Practices Section of MSDS for additional information.)

Eye contact may cause minor physical irritation.

Inhalation of dust may cause upper respiratory irritation with coughing and sneezing.

Precautionary Measures:

Avoid contact with eyes.

Avoid creating dust.

Provide adequate ventilation and respiratory protection if necessary.

Respiratory Protection:

A NIOSH (Type TC-21C-XXX) dust respirator may be desirable if dust is created in handling and is required at or above the Permissible Exposure Limit (PEL) for nuisance particulates. Consult MSDS Section 2 for exposure limits.

Ventilation:

Local Exhaust: Not generally required, but should be used where applicable.

Mechanical: Not generally required, but should be used where applicable.

Special: None

Other: None

Skin Protection: Not generally required.

Eye Protection: Goggles recommended.

Other Protective Clothing or Equipment: Normal work clothes.

Work/Hygienic Practices:

Observe precautions noted above.

Section 8 of this MSDS indicates that this product can contain quartz (crystalline silica). Quartz 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. Quartz is represented by the combined fractions of non-respirable sized particles and of respirable sized particles (less than ten microns in aerodynamic diameter).

Respirable sized quartz has been tied to more serious health effects (silicosis and lung cancer). Siplast has not been able to detect any respirable sized quartz in vermiculite based on industrial hygiene sampling of workers at Paraslope production facilities. We believe the highest potential for exposure exists at the production facilities due to the high volume of product produced and handled.

In addition, a wet sieving analysis combined with x-ray diffractometry has been conducted on vermiculite. Results indicate that respirable quartz is not present above the 0.1% by weight limit established by the Occupational Safety and Health Administration (OSHA) for carcinogens. OSHA states that if the hazardous substance is contained in the product below 0.1% by weight and if exposures do not exceed permissible exposure limits then the hazards do not apply.

Results of monitoring and analysis are available upon request.

Paraslope is an asphalt-coated product which further reduces worker exposure to dust (especially crystalline silica).

Section IX

Emergency and First Aid Procedures

EYES: In case of eye contact, do not rub eyes. Flush with plenty of water while holding eyelids apart. If irritation, blinking or tearing occur and persist, consult a physician.

SWALLOWED: Adverse health effects are not expected if swallowed. Consult a physician if symptoms develop.

INHALATION: If inhaled, get fresh air. If symptoms persist, consult a physician.

The data included herein are presented according to Siplast's practices current at the time of preparation hereof, are made available solely for the consideration, investigation and verification of the original recipients hereof and do not constitute a representation or warranty for which Siplast assumes legal responsibility. 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.

Section X - Government Reporting Information - U.S. Only

Proper Shipping Name: Not regulated
Hazard Class: Nonhazardous
Identification #: Not applicable
Label(s) Required: Not applicable
Surface Freight Classification: Vermiculite other than crude.
SARA Title III Section 302: No
SARA Title III Section 313: No