



## MATERIAL SAFETY DATA SHEET

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### IDENTIFICATION

**PRODUCT NAME:** Stego Wrap Vapor Barrier

**CHEMICAL FAMILY:** Polyolefin

### INGREDIENTS

COMPOSITION	NOMINAL %	PEL/TLV	HAZARDS
Polyethylene	> 99 %	None	None noted.
Flux-Calcined Diatomaceous Earth	< 1 %		Long-term exposure to excessive crystalline silica dust concentrations may cause pulmonary disease.
May contain up to 63% crystalline silica			IARC has classified crystalline silica as respirable dust probably carcinogenic for humans.
1) Cristobalite	< 60 %	TWA 0.1 mg/m <sup>3</sup>	
2) Quartz	< 3 %	TWA 0.1 mg/m <sup>3</sup>	Respirable dust.

The additives in this product are encapsulated in a thermoplastic film with limited release under normal conditions of transportation and storage. Increased release may occur when the resin is melted, ground to a smaller pellet size or subjected to decomposition, as by excessive heat. The specific potential for release under user's conditions of handling of this material should be evaluated by a qualified health specialist.

### PHYSICAL DATA

**MELTING POINT:** Crystalline, 212-257° (100-125°C) (ASTM D 2117)

**DENSITY:** 0.90-0.94 g/cc (ASTM D 792)

**SOLUBILITY IN WATER:** Insoluble

**APPEARANCE AND ODOR:** Clear to white solid opaque pellets; odorless

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## HEALTH INFORMATION / OCCUPATIONAL EXPOSURE LIMITS

**INHALATION:** Nuisance dust can be caused by handling and some operations. Fumes may be generated in some operations using heated polyethylene. Flux-calcined diatomaceous earth contains crystalline silica, which is considered a hazard by inhalation. IARC has classified crystalline silica as probably carcinogenic for humans. This classification is based on the findings of laboratory animal studies that were considered sufficient, and data from epidemiological studies that were considered limited for carcinogenicity. Crystalline silica is also a known cause silicosis, a non-cancerous lung disease.

**INGESTION:** Acute oral doses of 8 g/kg fed to rats showed no noticeable toxic effects. Dietary levels of 1.25, 2.5, and 5 percent polyethylene for 90 days produced no adverse effects in rats.

**EYE CONTACT:** Particles and fines may cause mechanical irritation.

**SKIN CONTACT:** The pellets can be abrasive. Molten or heated material can cause serious burns to unprotected skin.

**OSHA PERMISSIBLE EXPOSURE LIMIT:** For nuisance dust - 15 mg/m<sup>3</sup> for total dust and 5 mg/m<sup>3</sup> for respirable dust.

**ACGIH THRESHOLD LIMIT VALUE/TIME-WEIGHTED AVERAGE:** For nuisance dust - 10 mg/m<sup>3</sup> for total dust.

**VOC CONTENT:** None

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## FIRE AND EXPOSURE HAZARDS

**FLASH POINT & METHOD USED:** Does not apply.

**AUTO-IGNITION TEMPERATURE:** Approximately 645°F (ASTM D 1929)

**HAZARD FIRE RATING BY THE NATIONAL FIRE PROTECTION ASSOCIATION ( NFPA 704 ):** 1  
(0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe)

**FIRE FIGHTING PROCEDURES:** Use water spray, dry chemical, foam, or carbon dioxide. If possible, water should be applied as a spray from a fogging nozzle since polyethylene is a surface burning material.

**NOTE:** Individuals should perform only those firefighting procedures for which they have been trained.

**UNUSUAL FIRE & EXPLOSION HAZARDS:** Firefighters should wear self-contained breathing apparatus in the positive pressure mode with a full face piece when there is a possibility of exposure to smoke, fumes, or hazardous decomposition products. The application of high velocity water will spread the burning surface layer.



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# EMERGENCY FIRST AID PROCEDURES

## FOR OVEREXPOSURE BY:

- SWALLOWING:** No need anticipated, however if occurs, call a physician or poison control center promptly.
- SKIN CONTACT:** If contacted by molten polymer, immediately flush area with large amounts of cold water. Get medical attention promptly.
- EYE CONTACT:** Immediately flush eyes with plenty of cool water for at least 15 minutes. Do not permit victim to rub eyes. Get medical attention.
- INHALATION:** No need anticipated, however if occurs, remove victim to fresh air. If victim has stopped breathing, give artificial respiration (preferably mouth-to-mouth) and GET MEDICAL ATTENTION IMMEDIATELY.

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## REACTIVITY

- STABILITY:** Generally stable
- HAZARDOUS POLYMERIZATION:** Not likely
- CONDITIONS AND MATERIALS TO AVOID:** May burn or react violently with fluorine/oxygen mixtures with 50 - 100% fluorine. May be decomposed by strong oxidizing agents, such as nitric or sulfuric acids, halogens, and chlorinating agents.
- HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition products may include C, CO, CO<sub>2</sub>, H<sub>2</sub>O, acrolein, formaldehyde, fumes possibly containing silica dust and other organic vapors.

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## SPECIAL PRECAUTIONS

The handling of pellets in both loading and unloading operations as well as fabrication may cause nuisance dust to form. Necessary precautions should be used.

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**NOTE:** The data set forth herein has been carefully compiled. However, there is no warranty of any kind, either expressed or implied. The author assumes no obligation.



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