

# MATERIAL SAFETY DATA SHEET

Page 1

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**MATERIAL IDENTIFICATION** "XENOLITE" TPE ELASTOMER, "TB-E", STRATA 300/400

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**MSDS NUMBER** XENOLITE "TB-E", STRATA 300/400

"XENOLITE" is a registered trademark of Lite Tech Inc.

**MANUFACTURER**

LITE TECH, INC.  
975 MADISON AVE.  
NORRISTOWN, PA. 19403

**PHONE NUMBER**

Product Information: (610) 650-8690  
Fax: (610) 650-8694  
Emergency: (416) 787 1945

**CHEMICAL FAMILY:** Filled Polymer Composition

**TRADE NAMES / SYNONYMS:** XENOLITE

**TSCA INVENTORY STATUS:** All components listed

**WHMIS:** This is a WHMIS controlled product, Class D2A

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**COMPONENTS**

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<u>Material</u>	<u>CAS NUMBER</u>
POLYOLEFIN ELASTOMER	26221-73-8
ANTIMONY	7440-36-0
BISMUTH	7440-69-9
HYDROCARBON OIL	64742-01-4
OLEAMIDE (Slip Agent)	301-02-0
ANTIOXIDANT	6683-19-8
ANTIOXIDANT	31570-04-4

**Antimony and bismuth powder bound in a thermoplastic polymer does not present a toxicity hazard unless the compound is ground to a powder and inhaled.**

**PHYSICAL DATA**

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Melting Point : 79 C  
% Volatiles : Negligible  
Water Solubility : Negligible  
Odor : None  
Form : Solid Pellets or Sheet/Rolls  
Specific Gravity : 2.8

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**HAZARDOUS REACTIVITY**

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Instability	Stable at normal temperatures and storage conditions
Decomposition	Decomposes with heat.

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**FIRE AND EXPLOSION DATA**

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FLASH POINT	Not available
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**FIRE AND EXPLOSION HAZARDS**

Solid polymer compound can be combusted only with difficulty

Hazardous gases/vapors produced in fire are: carbon monoxide, carbon dioxide, antimony

**EXTINGUISHING MEDIA**

Water. Foam. Dry Chemical. CO2

**SPECIAL FIRE FIGHTING INSTRUCTIONS**

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus

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**HEALTH HAZARD INFORMATION**

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**POLYOLEFIN ELASTOMER**

**INGESTION** The oral LD-50 in rats using one type of ethylene copolymer is in excess of 1000 mg/kg of body weight. Two week metabolic tests with dogs and rats showed no significant amount of polymer was retained by the animals. Two types of ethylene copolymer were fed to rats for 90 days at the 5 and 10% level in the diet. No gross pathological changes were found. Ethylene copolymer resins have low toxicity

**SKIN** No data are available. However, based on experience with handling these polymers, no unusual dermatitis hazard is expected from routine handling. Molten polymer contacting the skin will cause thermal burns.

**EYE** Mechanical irritation

**INHALATION** Polymer/compound are not respirable as marketed. At processing temperatures above 204 C, fumes irritating to the eyes, nose, and throat may be produced. Exposure may result in redness, tearing and itching in the eyes together with soreness in the nose and throat with coughing.

**CHRONIC EFFECTS** No compound related effects were seen at the 50 ppm level.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** None known

None of the compounds present in the polymer at concentrations > 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen

**ANTIMONY**

**INGESTION** Ingestion may cause nausea, vomiting and severe diarrhea. Inflammation of the kidneys and liver, with bleeding, may occur. In acute toxicity testing in animals, antimony was of slight toxicity by ingestion. Single ingestion exposure in animals resulted in no weight gain for many days after exposure. Repeated exposure of animals, by ingestion, caused reduced weight gain, and alterations of blood parameters. Reports are vague on the nature of the antimony exposures, but repeated and long term exposures caused injury to heart muscles.

**SKIN / EYE** In powder form, it can be a skin, eye nose and throat irritant. It can cause allergic skin rashes. It is untested for animal sensitization.

**INHALATION** Compound is not respirable as marketed in pellet or sheet form, unless ground/powdered. In powder form, may cause irritation of the respiratory tract. (See chronic effects below).

**CHRONIC EFFECTS** Chronic or excessive exposure to antimony fumes or dust may cause skin postules, bleeding gums, conjunctivitis, laryngitis, headache, weight loss, anemia, pain or tightness in the chest, shortness of breath, metallic taste and decreased sense of smell. Studies involving antimony and its compounds have shown a causal link between antimony exposure and increased levels of throat and lung cancer among workers and animals. While it appears that antimony compounds (not metal) may be more highly toxic, this product should be treated as a suspected carcinogen. Studies involving animals and humans have shown that chronic high exposure may lead to teratogenic effects.

**ANIMAL DATA:**

Inhalation LC50	:	No information found
Skin absorption LD50	:	No information found
Oral LD50	:	7000 mg/kg in rats (very low toxicity by ingestion)

No animal test reports are available to define carcinogenic, mutagenic, developmental, or reproductive hazards

**HYDROCARBON OIL**

**INGESTION** Hydrocarbon lubricating oils have low to moderate oral toxicity, with with overexposure. Vomiting due to irritation of the digestive tract is common. Keep airway clear. This product contains no ingredients listed by IARC, NTP and ACGIH as carcinogens. Oral LD50 : > 5,000 mg/kg

**SKIN / EYE** May cause eye irritation. Prolonged or repeated skin exposure to liquid may cause dry skin, irritation and acne

**INHALATION** Not sufficiently volatile to present a hazard from vapor inhalation under normal use. High temperatures may cause symptoms of respiratory tract irritation.

**BISMUTH**

**INGESTION** Stomatitis, diarrhea, headache, fever, rheumatic pains. Not listed as a carcinogen by IARC, NTP or OSHA. Not reported as mutagen or with genetic effects.

**SKIN / EYE** In powder form, dust may irritate the skin and the eyes, with possible exfoliative dermatitis of the skin.

**INHALATION** Compound is not respirable as marketed. Exposure to dust or fumes may cause foul breath, metallic taste or gingivitis

**CHRONIC EFFECTS** Available data on bismuth metal exposure is limited. Studies have shown that chronic exposure may result in anemia, "Lead Line" on gums, possible ulcerative stomatitis.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE (to dust or fumes)**  
Pre-existing respiratory or stomach.

**ACUTE TOXICITY** No reported effects

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### **EXPOSURE LIMITS**

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"XENOLITE" TB-E ETHYLENE COPOLYMER RESIN  
TLV (ACGIH) : Not Applicable  
PEL (OSHA) : Not applicable

### **OTHER APPLICABLE EXPOSURE LIMITS**

ANTIMONY POWDER  
TLV (ACGIH) : 0.5mg/cu m, as Sb  
PEL (OSHA) : 0.5 mg/ cu m – 8 hr. TWA – Total dust

BISMUTH POWDER  
TLV (ACGIH) ; Not known  
PEL (OSHA) : Not known

HYDROCARBON OIL  
TLV (ACGIH) : 5 mg/ cu m (ACGIH 2003)  
PEL (OSHA) : 5 mg/ cu m

### **SAFETY PRECAUTIONS**

Avoid breathing dust during compounding or if compound ground/powdered.  
See FIRST AID and PROTECTION INFORMATION sections

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### **FIRST AID**

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#### **INHALATION**

No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary. If exposed to fumes from overheating or combustion, move to fresh air.

**SKIN CONTACT**

The compound is not likely to be hazardous by skin contact, but cleansing the skin after use is advisable. If molten polymer gets on skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Obtain medical treatment for thermal burn. In case of contact, wash skin with soap and water

**EYE CONTACT**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

**INGESTION**

No specific intervention is indicated as compound is not likely to be ingested, nor to be hazardous by ingestion. Consult a physician if necessary

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**PROTECTION INFORMATION**

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**GENERALLY APPLICABLE CONTROL MEASURES AND PRECAUTIONS**

Use only with adequate ventilation. Avoid dust generation

**PERSONAL PROTECTIVE EQUIPMENT****EYE/FACE PROTECTION**

Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact with molten material.

**RESPIRATORS**

A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge with dust/mist filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, or exposure levels are not known or any other circumstances where air purifying respirators may not provide adequate protection. during grinding, sanding or sawing operations, use a NIOSH/MSHA approved air purifying respirator with dust/mist cartridge or canister if airborne particulate concentrations are expected to exceed permissible exposure levels.

**PROTECTIVE CLOTHING**

If there is potential contact with hot/molten polymer, wear heat resistant clothing, gloves and footwear. Wear leather or cotton gloves when sawing routing, drilling, or sanding.

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**DISPOSAL INFORMATION**

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**AQUATIC TOXICITY**

Negligible solubility.

Hydrocarbon oil : Ecotoxicity, LC50 (fish) > 1000 mg/L (low toxicity), Bioaccumulation:

Log Pow = > 3.9 - > 6.0. Oil is expected to be slowly biodegradable.

**SPILL, LEAK OR RELEASE**

Use appropriate personal protective equipment during clean up. Recover undamaged and minimally contaminated material for reuse or reclamation. Shovel or sweep up

**WASTE DISPOSAL**

Preferred options for disposal are (1) recycling, (2) landfill – ( no components listed under EPA TLCP RCRA), (3) incineration with energy recovery. Treatment, storage, transportation and disposal must be in accordance with applicable federal, state and local regulations.

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**SHIPPING & STORAGE INFORMATION**

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SHIPPING – DOT/TDG : Not Regulated. No proper shipping name.

STORAGE : Store in cool place. Keep containers closed

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**ADDITIONAL INFORMATION & REFERENCES**

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NA = Not applicable

NE = Not Established

**STATE RIGHT-TO-KNOW LAWS**

No substance on the state hazardous substances list, for the states Indicated below, are used in the manufacture of the products on this MSDS sheet, with the exceptions listed

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**PENNSYLVANIA**

Special Hazardous substances > 0.01%  
Non-hazardous listed if > 3%

Hydrocarbon oil  
see page 1

**CALIFORNIA****WARNING**

Substances known to state of CA to cause cancer

Hydrocarbon oil

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The hydrocarbon oil, a severely solvent-refined paraffinic, is covered by the OSHA Hazard Communication Rule 29, CFR 1910.1200.

All chemicals in the oil are TSCA listed... NFPA Rating Health 0, Fire 1, Reactivity, 0

**PREPARATION DATE OF MSDS**

PREPARED BY LITE TECH INC – M Lilley  
TEL # (610) 650-8690  
DATE UPDATED (V-5) MARCH 19, 2018

**DISCLAIMER**

Information presented herein has been compiled from information provided to us by our suppliers and other sources considered to be dependable and is accurate to the best of our knowledge and belief but is not guaranteed to be so.

