

## 1. PRODUCT AND COMPANY IDENTIFICATION

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**PRODUCT NAME:** Tecafine HDPE  
**SYNONYMS:** Polyethylene copolymer  
**PRODUCT CODES:** Not Applicable  
  
**MANUFACTURER:** Ensinger Inc.  
**DIVISION:** Stock Shapes  
**ADDRESS:** 365 Meadowlands Blvd., Washington, PA 15301  
  
**EMERGENCY PHONE:** (724) 746-6050  
**OTHER CALLS:** (856) 227-0500  
  
**CHEMICAL NAME:** 1-Hexene, polymer with ethylene  
**CHEMICAL FAMILY:** Polyethylene  
**CHEMICAL FORMULA:** basic formula (C<sub>2</sub>H<sub>4</sub>)<sub>n</sub>  
  
**PRODUCT USE:** Stock Shape for Machining  
  
**PREPARED BY:** Kenneth S. Grier, Technical Sales and Applications Manager  
  
**SECTION 1 NOTE:** Revised February 9, 2017

## 2. HAZARDS IDENTIFICATION

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**EMERGENCY OVERVIEW:** Mechanical injury only.

**ROUTES OF ENTRY:** Eyes

**POTENTIAL HEALTH EFFECTS**

**EYES:** Solid or dust causes irritation or corneal injury due to mechanical action.

**SKIN:** Essentially nonirritating to skin. Mechanical injury only. Molten material may burn skin.

**INGESTION:** Single dose oral LD50 has not been determined. Single dose oral toxicity is believed to be very low. Now hazards anticipated from ingestion incidental to industrial exposure.

**INHALATION:** Dust may cause irritation to upper respiratory tract. At room temperature, exposure to vapors are unlikely due to physical properties, normal processing temperatures may generate vapors, which may cause irritation if ventilation is inadequate.

ACUTE HEALTH HAZARDS: None Known

CHRONIC HEALTH HAZARDS: None Known

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None Known

CARCINOGENICITY: None Known

Particulates:

- OSHA: Particulates not otherwise regulated/ OSHA (PEL) 15 mg/m<sup>3</sup> (TWA, Total Dust)
- Particulates not otherwise regulated/ OSHA (PEL) 5 mg/m<sup>3</sup> (TWA, Respirable Dust)
- ACGIH: Particulates not otherwise regulated/ ACGHI (TLV) 10 mg/m<sup>3</sup> (TWA, Total Dust)

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

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INGREDIENT: 1-Hexene, polymer with ethene

<u>CASNO.</u>	<u>%WT</u>
25213-02-9	>99,5

This product contains a proprietary blend of components encapsulated within a polymer matrix. These components are not regarded as hazardous under 2012 OSHA Hazard Communication Standard; 29CFR Part 1910.1200.

### 4. FIRST AID MEASURES

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**EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Mechanical effects only.

**SKIN:** Wash off in flowing water or shower.

**INGESTION:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling. If ingested, induce vomiting; if patient is conscious. Call a poison control center/physician, if patient feels unwell.

**INHALATION:** Remove to fresh air, if effects occur. Consult a physician.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

## 5. FIRE FIGHTING MEASURES

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**AUTOIGNITION TEMPERATURE:** >572°F (300°C)

**EXTINGUISHING MEDIA:** Carbon dioxide, water spray, dry chemical

**SPECIAL FIRE FIGHTING PROCEDURES:** Combustible particulate solid will decompose under fire conditions. Keep away from heat and sources of ignition. May produce toxic fume of carbon monoxide, carbon dioxide, and unburned hydrocarbons; if burning.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None Known

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide, and unburned hydrocarbons

**SECTION 5 NOTES:** Wear full protective suit. In case of combustion, use a suitable breathing apparatus. Polyolefin dust particles in the atmosphere are combustible and may be explosive. Keep away from heat and sources of ignition.

## 6. ACCIDENTAL RELEASE MEASURES

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**ACCIDENTAL RELEASE MEASURES:** Ventilate the area and prevent access to unauthorized people. Wear suitable personal protective equipment. Do not allow entry to drains, water courses or soil. Prevent spreading by use of suitable barriers. Take up with suitable equipment, fill up in air-tight containers and give further treatment as soon as possible.

## 7. HANDLING AND STORAGE

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**HANDLING AND STORAGE:** Avoid accumulation of dust in enclosed space. Use in well-ventilated area. Static discharge (spark) in high dust environments may be explosive. Electrostatic charge may build up during handling. Equipment should be grounded and bonded. Metal containers involved in the transfer of this material should be grounded and bonded. All electrical equipment should be grounded and conform to applicable electric codes and regulatory requirements. Material creates dangerous slipping hazard on hard surfaces. After handling, always wash hands thoroughly with soap and water. Keep away from strong oxidizing compounds. Store in a well-ventilated place. Provide ventilation and wear necessary protectors.

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**OTHER PRECAUTIONS:** Obtain special instructions, before use. Do not breathe dust. Wash hands thoroughly after handling. Do not eat, drink or smoke; when machining this product. Use personal protective equipment as required.

**8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**

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**ENGINEERING CONTROLS:** Standard ventilation required

**VENTILATION:** Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

**RESPIRATORY PROTECTION:** For most conditions a dust mask is sufficient; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

**EYE PROTECTION:** Safety glasses should be sufficient for most operations; however, for dusty operations wear chemical goggles. If vapor exposure causes eye discomfort, use a full-face respirator

**SKIN PROTECTION:** No precautions other than clean body-covering clothing should be needed.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** None Known

**Special Precautions to be taken in Handling and Storage:** Store in sealed containers. Protect from atmospheric moisture. Molten material can produce thermal burns. Avoid skin contact. Fumes released during normal processing may cause irritation. Provide adequate ventilation. Heating the resin above normal processing temperatures may cause hazardous decomposition products. Do not overheat. Handling and fabrication of plastic resins can result in the generation of dust. Dust results from sawing, filing, and sanding of plastic parts in post-molding operations. Quantities of dust in air may be combustible and may cause respiratory irritation.

**EXPOSURE GUIDELINES**

Particulates not otherwise regulated:

- OSHA: Particulates not otherwise regulated/ OSHA (PEL) 15 mg/m<sup>3</sup> (TWA, Total Dust)
- Particulates not otherwise regulated/ OSHA (PEL) 5 mg/m<sup>3</sup> (TWA, Respirable Dust)
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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**APPEARANCE:** Translucent to white or opaque color stock shape

**ODOR:** None



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PHYSICAL STATE: Solid  
 AUTOIGNITION TEMPERATURE: >572° F (300°C)  
 MELTING POINT: 122 – 338°F (50 - 170°C)  
 SPECIFIC GRAVITY (H2O = 1) : <1.0  
 SOLUBILITY IN WATER: Insoluble

10. STABILITY AND REACTIVITY

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STABILITY: Stable under normal conditions.  
 CONDITIONS TO AVOID (STABILITY): Avoid contact with strong oxidizers, excessive heat, sparks or open flame.  
 INCOMPATIBILITY (MATERIAL TO AVOID): Material may be softened by some hydrocarbons  
 HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon monoxide, olefinic and paraffinic compounds, trace amounts of organic acids, ketones, aldehydes and alcohols may be formed.  
 HAZARDOUS POLYMERIZATION: Not Applicable

11. TOXICOLOGICAL INFORMATION

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TOXICOLOGICAL INFORMATION: No data – In solid state, this material is not considered as being harmful to human health.

12. ECOLOGICAL INFORMATION

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ECOLOGICAL INFORMATION: No data – This material does not harm the environment, but is not biodegradable.

13. DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD: Dispose of contents/containers in accordance with local, regional, national and international regulations.



## 14. TRANSPORT INFORMATION

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U.S. DEPARTMENT OF TRANSPORTATION  
Not regulated

## 15. REGULATORY INFORMATION

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### U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): All ingredients are either exempt or listed on the TSCA Chemical Substance Inventory.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): This product contains no known toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40CFR372.

California Proposition 65: This product may contain one or more chemical substances as set forth in California Proposition 65 chemicals listed dated August 5, 2016.

## 16. OTHER INFORMATION

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### ADDITIONAL INFORMATION

**MEDICAL USE: CAUTION** – Do not use in medical applications involving permanent implantation in the human body.

This Safety Data Sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believe this information to be correct but cannot guarantee its accuracy or completeness. Health and safety precaution in this data sheet may not be adequate for all individuals and/or situations. It is the user's responsibility to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in the data sheet shall be construed as a permission or recommendation for the use of any product in a manner that may infringe existing patents. No warranty is made, either expressed or implied.