

**Product Code:** ISO-HUM**Product Name:** Humulene**Issue date** 30-Mar-2018**Revision date** 30-Mar-2018**Version** 3**1. Identification of the substance | preparation | company | undertaking****Product identifier****Product name** Humulene**Other means of identification****Product code** ISO-HUM**Synonyms** N/A**Recommended use of the chemical and restrictions on use****Recommended Use** Industry Use.**Uses advised against** No information available**Details of the supplier of the safety data sheet****Supplier Address**

324 Airport Industrial Dr. Ypsilanti, MI 48198

**Emergency telephone number****Company Phone Number** Use CHEMTREC instead of Emergency Phone Number 1-800-424-9300**Emergency telephone****2. Hazard Identification****Classification**

Flammable liquids

Category 4

**Label Elements****EMERGENCY OVERVIEW****DANGER****Hazard Statements:**

Combustible liquid

**Precautionary Statements - Prevention**

Keep away from flames and hot surfaces. - No smoking. Wear protective gloves/eye protection/face protection.

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell.

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish.**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC)****Other Information**

100 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. Composition/information on Ingredients

**Chemical Family** Aliphatic hydrocarbons.  
**Formula** C<sub>15</sub>H<sub>24</sub>

Chemical Name	CAS No.	Weight-%
alpha-Humulene	6753-98-6	100

### 4. First Aid Measures

**Description of first aid measures**

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water. Wash off immediately with plenty of water. Wash contaminated clothing before reuse. Consult a physician if necessary.

**Inhalation** Remove to fresh air. If breathing is difficult, give oxygen. Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Consult a physician if necessary.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

### 5. Fire-Fighting Measures

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** .

**Specific hazards arising from the chemical**

Combustible material.

**Hazardous combustion products** Irritating or toxic substances may be emitted upon burning, combustion, or decomposition.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Special protective actions for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions**                      Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and inhalation of vapors. Wear protective gloves/protective clothing and eye/face protection. Wash thoroughly after handling.

### Environmental precautions

**Environmental precautions**              See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for Containment**                Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**                Pick up and transfer to properly labeled containers.

## 7. Handling and Storage

### Precautions for safe handling

**Advice on safe handling**                Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation, especially in confined areas. Wash thoroughly after handling. When using do not eat, drink or smoke.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions**                      Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Keep locked up and out of reach of children.

**Incompatible materials**                None known based on information supplied.

## 8. Exposure Controls/Personal Protection

### Control parameters

**Exposure guidelines**                      This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering controls**                      Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection**                      Wear safety glasses with side shields (or goggles). Avoid contact with eyes.

**Skin and Body Protection**                Avoid contact with skin. Wear protective gloves and protective clothing.

**Respiratory protection**                      If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. Ensure adequate ventilation, especially in confined areas.

**General hygiene considerations**        Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. When using do not eat, drink or smoke. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Regular cleaning of

equipment, work area and clothing is recommended. Avoid breathing (dust, vapor, mist, gas).

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Characteristic Odor
<b>Appearance</b>	Clear	<b>Odor threshold</b>	Not applicable
<b>Color</b>	Colorless to Pale Yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not applicable	
Melting point / freezing point	Not applicable	
Boiling point / boiling range	No data available	
Flash Point	90 °C / 194 °F	
Evaporation Rate	Not applicable	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		
Upper flammability limit:	Not applicable	
Lower flammability limit:	Not applicable	
Vapor pressure	Not applicable	
Vapor Density	Not applicable	
Specific gravity	Not applicable	
Water solubility	Not applicable	
Solubility in other solvents	Not applicable	
Partition coefficient	Not applicable	
Autoignition Temperature	Not applicable	
Decomposition temperature	Not applicable	
Kinematic viscosity	No data available	
Dynamic viscosity	Not applicable	
Explosive properties	Not applicable	
Oxidizing properties	Not applicable	

### Other Information

<b>Softening point</b>	not applicable
<b>Molecular weight</b>	204.36
<b>VOC content (%)</b>	Not applicable
<b>Density</b>	Not applicable
<b>Bulk Density</b>	Not applicable

## 10. Stability and Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Extremes of temperature and direct sunlight.

### Incompatible materials

None known based on information supplied.

### Hazardous Decomposition Products

None known based on information supplied.

## 11. Toxicological Information

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin contact</b>	Avoid contact with skin.
<b>Ingestion</b>	No data available.

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Sensitization</b>	Not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.

### Numerical measures of toxicity - Product Information

**Unknown acute toxicity** 100 % of the mixture consists of ingredient(s) of unknown toxicity

## 12. Ecological Information

### Ecotoxicity

100 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

### Persistence and degradability

No information available.

### Bioaccumulation

No information available.

**Other adverse effects** No information available

## 13. Disposal Considerations

### Waste treatment methods

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.

**14. Transport Information**

**DOT** Not regulated

**15. Regulatory Information****US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

**U.S. EPA Label information**

**EPA Pesticide registration number** Not applicable

**16. Other Information**

**Issue date** 30-Mar-2018

**Revision date** 30-Mar-2018

**Revision note**

No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

materials or in any process, unless specified in the text.

**End of Safety Data Sheet**