

**1. PRODUCT AND COMPANY IDENTIFICATION:**

|                     |  |
|---------------------|--|
| <b>PRODUCT CODE</b> | A0195  |
| <b>PRODUCT NAME</b> | DIHYDRO IONONE BETA  |
| <b>SUPPLIER</b>     | Shanghai M & U International Trade Co., Ltd.<br>Rm 1717, No 598 North NuJiang Road<br>200333 Shanghai, China<br>+86-21-32515501 32515502<br>sales@mu-intel.com |

**FOR EMERGENCIES CALL CHEMTREC: 800-424-9300 (24-HOURS)**

**2. HAZARD IDENTIFICATION:**

**Emergency Overview**

**OSHA Hazards**

Irritant

**GHS Classification**

Skin irritation (Category 2)

Acute aquatic toxicity (Category 2)

**GHS Label elements, including precautionary statements**

Pictogram



Signal word

Warning

Hazard statement(s)

H315 Causes skin irritation

H401 Toxic to aquatic life

Precautionary statement(s) none

**HMIS Classification**

**Health hazard** 1

**Flammability** 1

**Physical hazards** 1

**NFPA Rating**

**Health hazard** 1

**Fire** 1  
**Reactivity Hazard** 0

### **Potential Health Effects**

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation  
**Skin** May be harmful if absorbed through skin. Causes skin irritation  
**Eyes** Causes eye irritation  
**Ingestion** May be harmful if swallowed

## **3. COMPOSITION AND INFORMATION ON INGREDIENTS:**

**SYNONYM** 4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)butan-2-one  
**Formula** C13 H22 O  
**Molecular Weight** 194.30g/mol  
**CAS-No** EC-No  
17283-81-7 241-318-1

## **4. FIRST-AID GUIDE:**

### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area

### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician

### **In case of eye contact**

Flush eyes with water as a precaution

### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

## **5. FIRE-FIGHTING GUIDE:**

### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

### **Special protective equipment for firefighters**

Wear self contained breathing apparatus for firefighting if necessary

### **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

## 6. ACCIDENTAL RELEASE GUIDE:

### **Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

### **Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal

## 7. HANDLING AND STORAGE:

### **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.  
Normal measures for preventive fire protection.

### **Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage

## 8. EXPOSURE AND PERSONAL PROTECTION:

Contains no substances with occupational exposure limit values

### **Personal protective equipment**

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

#### **Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands

#### **Eye protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

**Skin and body protection**

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

**Appearance**

Form LIQUID  
Color COLORLESS TO PALE YELLOW

**Safety data**

|   |                   |
|---|-------------------|
| pH  | no data available |
| Melting point (°C)                        | no data available |
| Boiling point (°C)                        | 100               |
| Flash point (°F)                          | Closed cup >200   |
| Ignition temperature                      | no data available |
| Auto ignition temperature                 | no data available |
| Lower explosion limit                     | no data available |
| Upper explosion limit                     | no data available |
| Vapor pressure (mm Hg @20 °C)             | <1                |
| Density @25 °C                            | 0.931             |
| Water solubility                          | INSOLUBLE         |
| Partition coefficient:<br>n-octanol/water | no data available |
| Relative vapor density                    | no data available |
| Odor                                      | WOODY/FLORAL      |
| Odor Threshold                            | no data available |
| Evaporation rate                          | no data available |

**10. STABILITY AND REACTIVITY:**

**Chemical stability**

Stable under recommended storage conditions

**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

No data available

**Materials to avoid**

Strong oxidizing agents

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

**11. TOXICOLOGICAL INFORMATION:****Acute toxicity****Oral LD50**

No data available

**Inhalation LC50**

No data available

**Dermal LD50**

No data available

**Other information on acute toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitization**

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals

**Germ cell mutagenicity**

No data available

**Carcinogenicity****IARC**

No components of this product present at levels greater than or equal to 0.1% is identified as probable. Possible or confirmed human carcinogen by IARC

**ACGIH**

No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH

**NTP**

No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP

**OSHA**

No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

**Reproductive toxicity**

No data available

**Teratogenicity**

No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

No data available

**Aspiration hazard**

No data available

**Potential health effects**

|            |  |
|------------|--|
| Inhalation | May be harmful if inhaled. Causes respiratory tract irritation |
| Ingestion  | May be harmful if swallowed                                    |
| Skin       | May be harmful if absorbed through skin Causes skin irritation |
| Eyes       | Causes eye irritation  |

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

**Synergistic effects**

No data available

**Additional Information**

RTECS: Not available

**12. ECOLOGICAL INFORMATION:**

**Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**PBT and vPvB assessment**

No data available

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

Toxic to aquatic life

**13. DISPOSAL RECOMMENDATIONS:****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material

**Contaminated packaging**

Dispose of as unused product

**14. TRANSPORTATION INFORMATION:****DOT (US)**

Not dangerous goods

**IMDG**

UN number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)butan-2-one)

Marine pollutant: Marine pollutant

**IATA**

UN number: 3082 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, liquid, N.O.S. (4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)butan-2-one)

**Further information**

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packaging and combination packaging containing inner packaging with Dangerous Goods > 5L for liquids or > 5kg for solids.

**15. REGULATORY INFORMATION:**

## **OSHA Hazards**

Irritant

## **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

## **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

## **SARA 311/312 Hazards**

Acute Health Hazard

## **Massachusetts Right to Know Components**

No components are subject to the Massachusetts Right to Know Act

## **Pennsylvania Right to Know Components**

4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)butan-2-one      CAS-No  
17283-81-7

## **New Jersey Right to Know Components**

4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)butan-2-one      CAS-No  
17283-81-7

## **California Prop 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

## **16. OTHER INFORMATION:**

The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the MSDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the MSDS. The user should review these regulations to ensure full compliance.