

# N,N'-Diisopropylcarbodiimide

## Company Information

Sunchem Co.,Ltd.

Add: A-11F, 186 Yangtzi Middle Road, Yangzhou, China.

[Tel:+86 514 87851548](tel:+8651487851548)

Fax:+86 514 87872867

Email: [info@sunchemgroup.com](mailto:info@sunchemgroup.com)

## Product Identification

### 【Product Name】

N,N'-Diisopropylcarbodiimide

### 【Synonyms】

1,3-Diisopropylcarbodiimide

2-Propanamine, N,N'-methanetetraylbis-

DIPC

N,N'-Di(propan-2-yl)methanediimine

N,N'-Diisopropylcarbodiimide

### 【CAS】

[693-13-0](#)

### 【Formula】

C<sub>7</sub>H<sub>14</sub>N<sub>2</sub>

### 【Molecular Weight】

126.2

### 【EINECS】

211-743-7

### 【RTECS】

FF2175000

### 【RTECS Class】

Tumorigen

### 【Beilstein/Gmelin】

878281

### 【Beilstein Reference】

4-04-00-00531

### 【EC Class】

flammable, very toxic, irritant

## Physical and Chemical Properties

---

### 【Appearance】

Clear colorless to pale yellow liquid.

### 【Solubility in water】

Insoluble

### 【Boiling Point】

145

### 【Density】

0.909 g/cm<sup>3</sup> (25 °C)

### 【Usage】

Used in peptide synthesis.

### 【Refractive Index】

1.4320 (20 °C)

## First Aid Measures

---

### 【Ingestion】

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

### 【Inhalation】

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

### 【Skin】

Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

### **【Eyes】**

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

## **Handling and Storage**

---

### **【Storage】**

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

### **【Handling】**

Wash thoroughly after handling. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

## **Hazards Identification**

---

### **【Ingestion】**

Causes gastrointestinal irritation with nausea, vomiting and diarrhea.

### **【Inhalation】**

May be fatal if inhaled. Causes respiratory tract irritation. May cause allergic respiratory reaction.

### **【Skin】**

May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

### **【Eyes】**

Causes severe eye irritation. May result in corneal injury. May cause temporary blindness.

### **【Hazards】**

Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers.

### **【EC Risk Phrase】**

R 10 26 37/38 41 42/43

### **【EC Safety Phrase】**

S 23 26 28 36/37/39 45

## 【UN (DOT)】

1993

## Exposure Controls/Personal Protection

---

### 【Personal Protection】

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate protective gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to prevent skin exposure.

### 【Respirators】

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European S tandard EN 149 approved respirator when necessary.

## Fire Fighting Measures

---

### 【Flash Point】

33

### 【Fire Fighting】

Wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use w ater spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. May be ignited by heat, sparks, and fla me. Extinguishing media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use str aight streams of water.

### 【Fire Potential】

HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.

## Accidental Release Measures

---

### 【Small spills/leaks】

Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Remove all sources of ignition. U se a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor b ut may not prevent ignition in closed spaces.

## Stability and Reactivity

---

### 【Disposal Code】

1

### 【Stability】

Stable under normal temperatures and pressures.

### 【Incompatibilities】

Strong oxidizing agents.

### 【Decomposition】

Nitrogen oxides, carbon monoxide, carbon dioxide.

### 【Combustion Products】

Fire may produce irritating, corrosive and/or toxic gases.

## Transport Information

---

### 【UN Number】

1993

### 【Hazard Class】

3

### 【Packing Group】

I; II; III

### 【HS Code】

2925 20 00