



*Specialized in chemicals*

Hefei TNJ Chemical Industry Co.,Ltd.

D1508 Xincheng Business Center,

Qianshan Rd. Hefei 230022 China

Tel : (0086) 551 65418679

Fax: (0086) 551 65418697

Email: info@tnjchem.com

Site: www.tnjchem.com

## Material Safety Data Sheet

### Calcium carbide MSDS

#### Section 1: Chemical Product and Company Identification

**Product Name:** Calcium carbide

**Catalog Codes:** SLC3934

**CAS#:** 75-20-7

**RTECS:** EV9400000

**TSCA:** TSCA 8(b) inventory: Calcium carbide

**CI#:** Not available.

**Synonym:** Calcium acetylide

**Chemical Formula:** CaC<sub>2</sub>

**Contact Information for Emergency:** (0086) 551 65418677

**Hefei TNJ Chemical Industry Co.,Ltd.**

D1508 Xincheng Business Center

Qianshan Road, Hefei

230004Anhui

China

Tel : (0086) 551 65418679

Fax: (0086) 551 65418697

Email: info@tnjchem.com

Site: www.tnjchem.com

#### Section 2: Composition and Information on Ingredients

**Composition:**

Name	CAS # %	By Weight
Calcium carbide	75-20-7	100

**Toxicological Data on Ingredients:** Calcium carbide LD50: Not available. LC50: Not available.

#### Section 3: Hazards Identification

**Potential Acute Health Effects:**

Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant).

**Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

#### Section 4: First Aid Measures

##### Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

##### Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

##### Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

##### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

##### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

##### Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Serious Ingestion:** Not available.

#### Section 5: Fire and Explosion Data

**Flammability of the Product:** Flammable.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** Not available.

**Flammable Limits:** Not available.

**Products of Combustion:** Some metallic oxides.

**Fire Hazards in Presence of Various Substances:** Flammable in presence of acids, of moisture.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

Flammable solid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

**Special Remarks on Fire Hazards:** Not available.  
**Special Remarks on Explosion Hazards:** Not available.

### Section 6: Accidental Release Measures

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container.

**Large Spill:**

Flammable solid that, in contact with water, emits flammable gases. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Cover with dry earth, sand or other non-combustible material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

### Section 7: Handling and Storage

**Precautions:**

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Keep away from incompatibles such as oxidizing agents, acids, alkalis, moisture.

**Storage:**

Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. Keep container dry. Keep in a cool place.

### Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

### Section 9: Physical and Chemical Properties

**Physical state and appearance:** Solid.

**Odor:** Not available.

**Taste:** Not available.

**Molecular Weight:** 64.1 g/mole

**Color:** Not available.

**pH (1% soln/water):** Not available.  
**Boiling Point:** Not available.  
**Melting Point:** 2300°C (4172°F)  
**Critical Temperature:** Not available.  
**Specific Gravity:** 2.22 (Water = 1)  
**Vapor Pressure:** Not applicable.  
**Vapor Density:** Not available.  
**Volatility:** Not available.  
**Odor Threshold:** Not available.  
**Water/Oil Dist. Coeff.:** Not available.  
**Ionicity (in Water):** Not available.  
**Dispersion Properties:** Not available.  
**Solubility:** Not available.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.  
**Instability Temperature:** Not available.  
**Conditions of Instability:** Not available.  
**Incompatibility with various substances:**  
Extremely reactive or incompatible with acids, moisture. Highly reactive with alkalis. Reactive with oxidizing agents.  
The product reacts violently with water to emit flammable but non toxic gases.  
**Corrosivity:** Non-corrosive in presence of glass.  
**Special Remarks on Reactivity:** Not available.  
**Special Remarks on Corrosivity:** Not available.  
**Polymerization:** No.

## Section 11: Toxicological Information

**Routes of Entry:** Inhalation. Ingestion.  
**Toxicity to Animals:**  
LD50: Not available. LC50: Not available.  
**Chronic Effects on Humans:** The substance is toxic to lungs, mucous membranes.  
**Other Toxic Effects on Humans:**  
Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).  
**Special Remarks on Toxicity to Animals:** Not available.  
**Special Remarks on Chronic Effects on Humans:** Not available.  
**Special Remarks on other Toxic Effects on Humans:** Not available.

## Section 12: Ecological Information

**Ecotoxicity:** Not available.  
**BOD5 and COD:** Not available.  
**Products of Biodegradation:**  
Possibly hazardous short term degradation products are not likely. However, long term degradation products may

arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are more toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

### Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14: Transport Information

**DOT Classification:** CLASS 4.3: Material that emits flammable gases on contact with water.

**Identification:** : Calcium Carbide : UN1402 PG: I

**Special Provisions for Transport:** Not available.

### Section 15: Other Regulatory Information

**Federal and State Regulations:**

Pennsylvania RTK: Calcium carbide Massachusetts RTK: Calcium carbide TSCA 8(b) inventory: Calcium carbide  
CERCLA:

Hazardous substances.: Calcium carbide

**Other Regulations:** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).  
p. 5

**Other Classifications:**

**WHMIS (Canada):** CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

**DSCL (EEC):** R14- Reacts violently with water.

**HMIS (U.S.A.):**

**Health Hazard:** 1

**Fire Hazard:** 4

**Reactivity:** 2

**Personal Protection:** E

**National Fire Protection Association (U.S.A.):**

**Health:** 1

**Flammability:** 4

**Reactivity:** 2

**Specific hazard:**

**Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator

when ventilation is inadequate. Safety glasses.

### Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/10/2005 11:23 AM

**Last Updated:** 05/05/2015 12:00 PM

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall ScienceLab.com be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if ScienceLab.com has been advised of the possibility of such damages.*