



Specialized in chemicals

Hefei TNJ Chemical Industry Co.,Ltd.

B911 Xincheng Business Center,  
Qianshan Rd. Hefei 230022 China

Tel : (0086) 551 65418695

Fax: (0086) 551 65418697

Email: info@tnjchem.com

Site: www.tnjchem.com

## Material Safety Data Sheet

### 2-Nitrotoluene MSDS

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

**Product Name:** 2-Nitrotoluene

**CAS#:** 88-72-2

**CI#:** Not available.

**Synonym:** alpha-Methylnitrobenzene.

**Chemical Formula:** C7H7NO2

**Contact Information for Emergency:** (0086) 551 65418678

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

D1508 Xincheng Business Center

Qianshan Road, Hefei

230004Anhui

China

Tel : (0086) 551 65418678

Fax: (0086) 551 65418697

Email: info@tnjchem.com

Site: www.tnjchem.com

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

**Composition:**

Name	CAS # %	By Weight
2-Nitrotoluene	88-72-2	99%

#### Section 3: Hazards Identification

**Eye:** May cause eye irritation and possible burns.

**Skin:** Causes skin irritation. May be harmful if absorbed through the skin.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May be harmful if swallowed.

**Inhalation:** Harmful if inhaled. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause respiratory tract irritation.

**Chronic:** Effects may be delayed.

#### 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. Get medical attention if irritation occurs.

**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. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact:** Not available.

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

**Serious Inhalation:** Not available.

**Ingestion:** 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 if symptoms appear.

**Serious Ingestion:** Not available.

#### Section 5: Fire Fighting Measures

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** 420°C (788°F)

**Flash Points:** CLOSED CUP: 206.67°C (404°F).

**Flammable Limits:** Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...).

**Fire Hazards in Presence of Various Substances:** Slightly flammable to flammable in presence of heat.

**Explosion Hazards in Presence of Various Substances:** Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of shocks, of heat.

**Fire Fighting Media and Instructions:** SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

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

**Special Remarks on Explosion Hazards:** Explosive if confined and heated. Closed containers may rupture violently when heated. It may be shock sensitive. Impact sensitivity (minimum fall of a 2 kg. weight from a height of over 100 cm to cause at least 1 explosion in ten trials). This data came from the Hazardous Substance Data Bank.

#### Section 6: Accidental Release Measures

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

#### Section 7: Handling and Storage

**Precautions:** Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material.

Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, reducing agents, metals, alkalis.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## 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:** TWA: 1.5 (mg/m<sup>3</sup>) from OSHA (PEL) [United States] SKIN TWA: 1.5 (mg/m<sup>3</sup>) from NIOSH [United States] SKIN TWA: 0.2 (mg/m<sup>3</sup>) from ACGIH (TLV) [United States] SKIN Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

Physical State: Solid

Appearance: yellow

Odor: No information available

Odor Threshold: No information available

pH: No information available

Melting Point/Range: -9 °C / 15.8 °F

Boiling Point/Range: 222 °C / 431.6 °F

Flash Point: 95 °C / 203 °F

Evaporation Rate: No information available

Flammability (solid,gas): Not applicable

Flammability or explosive limits:

Upper: No data available

Lower: 2.2%

Vapor Pressure: 0.16 mbar @ 20 °C

Vapor Density: 4.73

Specific Gravity: 1.160

Solubility Insoluble in water: Partition coefficient;

n-octanol/water: No data available

Autoignition Temperature: 420 °C / 788 °F

Decomposition Temperature: No information available

Viscosity: No information available

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials, dust generation, excess heat.

**Incompatibility with various substances:** Strong oxidizing agents; Strong bases; Reducing agents.

**Corrosivity:** Not available. **Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**RTECS#:**

**CAS#** 88-72-2: XT3325000

**LD50/LC50:**

CAS# 88-72-2:

Inhalation, mouse: LC50 = 419 mg/m<sup>3</sup>;

Inhalation, rat: LC50 = 975 mg/m<sup>3</sup>;

Oral, mouse: LD50 = 1231 mg/kg;

Oral, rabbit: LD50 = 1750 mg/kg;

Oral, rat: LD50 = 1960 mg/kg;

Skin, rat: LD50 = >16 gm/kg;

.

**Carcinogenicity:**

CAS# 88-72-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found

**Teratogenicity:** May cause teratogenic effects.

**Reproductive Effects:** No information found

**Mutagenicity:** May cause mutagenic effects.

**Neurotoxicity:** No information found

**Other Studies:**

## Section 12: Ecological Information

No information available.

## Section 13: Disposal Considerations

Dispose of in compliance with all Federal, state and local laws and regulations.

## Section 14: Transport Information

**DOT Classification: class 6.1**

**Identification:** Dinitrotoluene: UN 1664 6.1/PG 2

**Special Provisions for Transport:** RQ: 10 lbs./4.53 kg

## Section 15: Other Regulatory Information

### US FEDERAL

#### TSCA

CAS# 88-72-2 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

CAS# 88-72-2: 1000 lb final RQ (listed under Nitrotoluene); 454 kg final RQ (listed under Nitr

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 88-72-2: immediate, delayed.

**Section 313** No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

CAS# 88-72-2 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 88-72-2 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

#### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**

T N

**Risk Phrases:**

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R 33 Danger of cumulative effects.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety Phrases:**

S 28 After contact with skin, wash immediately with...

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

**WGK (Water Danger/Protection)**

CAS# 88-72-2: 2

**Canada - DSL/NDSL**

CAS# 88-72-2 is listed on Canada's DSL List.

**Canada - WHMIS**

not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 88-72-2 is listed on the Canadian Ingredient Disclosure List.

**Section 16: Other Information**

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/09/2005 05:35 PM

**Last Updated:** 05/21/2016 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 we m be liable for any claims, losses, or damages of any third*

Hefei TNJ Chemical Industry Co.,Ltd.

*party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.*