

SAFETY DATA SHEET

1. IDENTIFICATION

Product name: 2-Nitrotoluene
Company: MIT-IVY INDUSTRY CO.,LTD
Address: 2-1402, OFFICE BUILDING 2, COMMERCIAL INNER STREET AND OFFICE 1, SHIMAO PLAZE YUNLONG DISTRICT XUZHOUJIANGSU, CHINA 221100
Responsible Department: Sales Department
Telephone: +86-17363307174
e-mail: info@mit-ivy.com

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

PHYSICAL HAZARDS

Not classified

HEALTH HAZARDS

Acute toxicity (Oral) Category 4
Germ cell mutagenicity Category 1B
Carcinogenicity Category 1B
Reproductive toxicity Category 2
Specific target organ toxicity Blood
- Single exposure [Category 2]
Specific target organ toxicity Liver Blood
- Repeated exposure [Category 2]

ENVIRONMENTAL HAZARDS

Acute aquatic hazard Category 2
Long-term aquatic hazard Category 2

Label elements

Pictograms or hazard symbols



Signal word

Danger

Hazard statements

Harmful if swallowed
May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
May cause damage to organs : Blood
May cause damage to organs through prolonged or repeated exposure : Liver Blood
Toxic to aquatic life
Toxic to aquatic life with long lasting effects

Precautionary statements

[Prevention]

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mist, vapors or spray.
Avoid release to the environment.
Do not eat, drink or smoke when using this product.
Wash hands and face thoroughly after handling.

Revision date: 2024.07.10

Wear protective gloves, protective clothing, face protection.

[Response]

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.

If exposed or concerned: Call a POISON CENTER or doctor.

[Storage]

Collect spillage.

[Disposal]

Store locked up.

Dispose of contents and container in accordance with local, regional, national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Substance
Components:	2-Nitrotoluene
Percent:	>99.0%(GC)
CAS RN:	88-72-2
Chemical Formula:	C ₇ H ₇ NO ₂

4. FIRST AID MEASURES

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Call a POISON CENTER or doctor/physician.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Call a POISON CENTER or doctor/physician.
Ingestion:	Call a POISON CENTER or doctor/physician. Rinse mouth.
Protection of first-aiders:	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
Unsuitable extinguishing media:	Solid streams of water
Specific hazards arising from the chemical:	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
Precautions for firefighters:	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.
Special protective equipment for firefighters:	When extinguishing fire, be sure to wear personal protective equipment

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
Environmental precautions:	Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned.
Methods and materials for containment and cleaning up:	Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical measures: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Wash hands and face thoroughly after handling.
Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.

Advice on safe handling: Avoid all contact!

Conditions for safe storage, including any

incompatibilities

Storage conditions: Keep container tightly closed. Store in a cool and dark place.
Store locked up.
Store away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Install a closed system or local exhaust. Also install safety shower and eye bath.

Exposure limits:

ACGIH TLV(TWA): 2 ppm (skin)

OSHA PEL(TWA): 5 ppm (skin)

Personal protective equipment

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.

Hand protection: Impervious gloves.

Eye protection: Safety goggles. A face-shield, if the situation requires.

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid

Form: Clear

Colour: Pale yellow - Yellow

Odour: Weakly Aromatic

pH: No data available

Melting point/freezing point: No data available

Boiling point/range: 222°C

Flash point: 106°C

Flammability or explosive limits:

Lower: 2.2%

Upper: No data available

Vapour pressure: 0.02kPa/20°C

Vapour density: 4.73

Relative density: 1.17

Solubility(ies):

[Water] Insoluble (0.044g/100mL, 20°C)

[Other solvents]

Miscible: Ether

Soluble: Alcohols, Benzene, Acetone, Chloroform, Petroleum ether, Petroleum benzene, Sulfur dioxide

Slightly soluble: Ammonia

Log Pow: 2.3

Autoignition temperature: 305°C

10. STABILITY AND REACTIVITY

Chemical stability: Stable under proper conditions.

Possibility of hazardous reactions: No special reactivity has been reported.

Incompatible materials: Oxidizing agents, Acids, Bases, Reducing agents

Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

Revision date: 2024.07.10 **11. TOXICOLOGICAL INFORMATION**

Acute Toxicity:	orl-rat LD50:891 mg/kg ihl-rat LC50:790 mg/m ³
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Germ cell mutagenicity:	dna-rat-ork 150 mg/kg dns-rat-lvr 500 ug/L dns-rat-ork 200 mg/kg sce-ham-ovr 355 mg/L
Carcinogenicity:	orl-rat TDLo:10.1 g/kg/12W-C
IARC =	Group 2A (Probably carcinogenic to humans)
NTP =	No data available
Reproductive toxicity:	orl-mus TDLo:140 g/kg (13W male) orl-rat TDLo:32123 mg/kg (13W male)
RTECS Number:	XT3150000

12. ECOLOGICAL INFORMATION

Ecotoxicity:	
Fish:	48h LC50:88 ppm (Oryzias latipes)
Crustacea:	No data available
Algae:	No data available
Persistence / degradability:	0.5 % (by BOD) , 0.8 % (by GC) , 2.3 % (by UV-VIS)
Bioaccumulative potential(BCF):	12.5 - 29.9 (conc. 0.1 ppm) , 6.6 - 29.7 (conc. 0.01 ppm)
Mobility in soil	
Log Pow:	2.3
Soil adsorption (Koc):	370
Henry's Law (PaM³/mol):	1.27

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

Hazards Class:	6.1: Toxic substance.
UN-No:	1664
Proper shipping name:	Nitrotoluenes, liquid
Packing group:	II
Marine pollutant	Y

15. REGULATORY INFORMATION

Regulations on the Control over Safety of Dangerous Chemicals (State Council announces on January 26, 2002 and revised on February 16,2011): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

This product is included in the list of dangerous chemicals(2015)/Serial No.: 2264

Revision date: 2024.07.105

16. OTHER INFORMATION

The reference company name of written contents

Company: MIT-IVY INDUSTRY CO.,LTD

Address: 2-1402,OFFICE BUILDING 2, COMMERCIAL INNER STREET AND OFFICE 1,
SHIMAO PLAZE YUNLONG DISTRICT XUZHOUJIANGSU, CHINA 221100

Department: Technical Information Department

Emergency telephone: 0086-17363307174

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority.

The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.