



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: 4-Nitro-1,2-phenylenediamine Monohydrochloride [Sensitive reagent for the determination of Se by GC-ECD]
Product code: A5081
Company: TCI (Shanghai) DEVELOPMENT CO., LTD.
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Revision number: 1

2. HAZARDS IDENTIFICATION

Classification of the GHS

PHYSICAL HAZARDS

Not classified

HEALTH HAZARDS

Acute toxicity (Oral)

Category 4

Acute toxicity (Dermal)

Category 4

Acute toxicity (Inhalation)

Category 4

Germ cell mutagenicity

Category 2

ENVIRONMENTAL HAZARDS

Not classified

GHS label elements

Pictograms or hazard symbols



Signal word

Danger

Hazard statement

Harmful by inhalation, in contact with skin and if swallowed
Suspected of causing genetic defects

Precautionary statements

[Prevention]

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Avoid breathing.
 Use only outdoors or in a well-ventilated area.
 Do not eat, drink or smoke when using this product.
 Wash hands thoroughly after handling.

[Response]

Wear protective gloves and eye/face protection.
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 Rinse mouth.

[Storage]

IF ON SKIN: Gently wash with plenty of soap and water.

[Disposal]

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents/container through a waste management company authorized by the local government

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Substance
Component(s):	4-Nitro-1,2-phenylenediamine Monohydrochloride [Sensitive reagent for the determination of Se by GC-ECD]
Percent:	>99.0%(T)
CAS Number:	53209-19-1
Synonyms:	1,2-Diamino-4-nitrobenzene Monohydrochloride
Chemical Formula:	C ₆ H ₇ N ₃ O ₂ ·HCl

4. FIRST AID MEASURES

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Get medical advice/attention.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get medical advice/attention.
Ingestion:	Get medical advice/attention. 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.
Specific hazards:	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
Specific methods:	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 extra personal protective equipment (P3 filter respirator for toxic particles). Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
Environmental precautions:	Prevent product from entering drains.
Methods and materials for containment and cleaning up:	Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Handling

Technical measures:	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.
Advice on safe handling:	Avoid all contact!

Storage

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:	Law is followed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Personal protective equipment

Respiratory protection: Dust 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): Solid

Form: crystal - powder

Color: Very pale yellow - Greyish yellow red

Odor: No data available

pH: No data available

Melting point/freezing point: No data available

Boiling Point/Range: No data available

Flash Point: No data available

Explosive limits

Lower: No data available

Upper: No data available

Density: No data available

Solubility: No data available

10. STABILITY AND REACTIVITY

Stability: Stable under proper conditions.

Reactivity: No special reactivity has been reported.

Incompatible materials: oxidizing agents

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Nitrogen oxides (NO_x), Hydrogen chloride

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye

damage/irritation: No data available

Germ cell mutagenicity: No data available

Carcinogenicity:

IARC = No data available

NTP = No data available

Reproductive toxicity: No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: No data available

Crustacea: No data available

Algae: No data available

Persistence / degradability: No data available

Bioaccumulative

potential(BCF): No data available

Mobility in soil

log Pow: No data available

Soil adsorption (K_{oc}): No data available

Henry's Law constant(PaM³/mol): No data available

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and 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: Does not correspond to the classification standard of the United Nations
UN-No: Not Listed

15. REGULATORY INFORMATION

Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

16. OTHER INFORMATION

The reference company name of written contents

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