

N,N'-Di-2-naphthyl-1,4-phenylenediamine 93-46-9 MSDS

Section 1. IDENTIFICATION

Product name: N,N'-Di-2-naphthyl-1,4-phenylenediamine

Revision number: 6

Section 2. HAZARDS IDENTIFICATION

GHS classification

PHYSICAL HAZARDS Not classified

HEALTH HAZARDS

Acute toxicity (Oral) Category 5

Category 3

Skin corrosion/irritation

Serious eye damage/eye irritation Category 2B

Category 1

Skin sensitization

ENVIRONMENTAL HAZARDS Not classified

GHS label elements, including precautionary statements

Pictograms or hazard symbols

Signal word Warning

Hazard statements May be harmful if swallowed

Causes mild skin irritation

Causes eye irritation

May cause an allergic skin reaction

Precautionary statements:

Avoid breathing dust/fume/gas/mist/vapours/spray.

[Prevention]

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/eye protection/face protection.

[Response] IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

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

Wash hands thoroughly after handling.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Call a POISON CENTER or doctor/physician if you feel unwell.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

Components: N,N'-Di-2-naphthyl-1,4-phenylenediamine

>96.0%(N)

Percent:

CAS Number: 93-46-9

N,N'-Di-2-naphthyl-1,4-phenylenediamine

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Formula: C₂₆H₂₀N₂

Section 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 if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of

soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Ingestion:

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

Section 5. FIRE-FIGHTING MEASURES

Dry chemical, foam, water spray, carbon dioxide.

Suitable extinguishing media:

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.

Section 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and Entry to non-involved personnel should be controlled Use personal protective equipment. Keep people away from and upwind of spill/leak.

around the leakage area by
emergency procedures: roping off, etc.
Environmental precautions: Prevent product from entering drains.
Methods and materials for Sweep dust to collect it into an airtight container, taking care not to disperse it.
containment and cleaning Adhered or collected material should be promptly disposed of, in accordance with
up: appropriate laws and regulations.

Section 7. HANDLING AND STORAGE

Precautions for safe 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 local exhaust if dust or aerosol will be generated.

Advice on safe handling: Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

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

Packaging material: Comply with laws.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls: Install a closed system or local exhaust as possible so that workers should not be

exposed directly. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

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

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

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Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal- Powder

Gray - Black

Colour:

Odour: No data available

pH: No data available

Melting point/freezing point: No data available

No data available

Boiling point/range:

Flash point: No data available

Flammability or explosive

limits:

No data available

Lower:

Upper: No data available

No data available

Relative density:

Solubility(ies):

No data available

[Water]

[Other solvents] No data available

Section 10. STABILITY AND REACTIVITY

Chemical stability: Stable under proper conditions.

Possibility of hazardous No special reactivity has been reported.

reactions:

Incompatible materials: Oxidizing agents

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

products:

Section 11. TOXICOLOGICAL INFORMATION

Acute Toxicity: orl-mus LD50:5000 mg/kg

orl-rat LD50:4500 mg/kg

Skin corrosion/irritation: skn-rbt 500 mg/24H MLD

eye-rbt 500 mg/24H MLD

Serious eye

damage/irritation:

Germ cell mutagenicity: No data available

Carcinogenicity:

No data available

IARC =

NTP = No data available

No data available

Reproductive toxicity:

RTECS Number: ST2100000

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: No data available

Crustacea: No data available

Algae: No data available

Persistence / degradability: 0 % (by BOD), 0 - 1 % (by HPLC)

Bioaccumulative No data available

potential(BCF):

Mobility in soil

Log Pow: No data available

Soil adsorption (Koc): No data available

Henry's Law No data available

constant(PaM3/mol):

Section 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.

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Section 14. TRANSPORT INFORMATION

Hazards Class: Does not correspond to the classification standard of the United Nations

UN-No: Not listed

Section 15. REGULATORY INFORMATION

Safe management ordinance of dangerous chemical product (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.

SECTION 16 - ADDITIONAL INFORMATION

N/A