SAFETY DATA SHEET

Oakwood Products, Inc
730 Columbia HWY N
Estill, SC 29918
www.oakwoodchemical.com

Phone Numbers:
Product Information 803-739-8800
Transportation Emergency 800-451-8346
Outside the USA 760-602-8700

MATERIAL IDENTIFICATION

NAME: N,N-Diethyl-N'-1-naphthylethylenediamine oxalate
CAS#: [29473-53-8]
CAT#: 092518
For R&D use only.

HAZARDS IDENTIFICATION

GHS Classification
Acute toxicity, oral (Category 4)
Skin corrosion/irritation (Category 2)
Serious eye damage/eye irritation (Category 2A)
Respiratory tract irritation (Category 3)

GHS Label elements, including precautionary statements

Pictograms

Signal Word Warning

Hazard Statement(s)
H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation

Precautionary Statement(s)
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

COMPOSITION/INFORMATION ON INGREDIENTS

N,N-Diethyl-N'-1-naphthylethylenediamine oxalate
**FIRST AID MEASURES**

**In case of eye contact**  
Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

**In case of skin contact**  
Wash thoroughly with soap and plenty of water. Seek medical attention.

**If inhaled**  
Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

**If swallowed**  
Do not induce vomiting. Give water to victim to drink. Seek medical attention.

**FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**  
Use carbon dioxide, dry chemical powder, alcohol-resistant or polymer foam.

**Special protective equipment for fire-fighters**  
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual fire and explosion hazards/decomposition of product**  
emits toxic fumes under fire conditions.

**ACCIDENTAL RELEASE MEASURES**

**Personal precautions**  
Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

**Environmental precautions**  
Prevent further leakage if safe to do so.

**Methods and materials for containment and clean up**  
Absorb spills on sand or vermiculite and place in closed container for disposal.

**HANDLING AND STORAGE**

**Precautions for safe handling**  
Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling.
Precautions for safe storage
Keep container tightly closed. Store in a cool, dry, well-ventilated area.

EXPOSURE CONTROL/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Eye/face protection
Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Hand/skin protection
Avoid all direct contact with product.
Wear chemical-resistant gloves.
Wear protective clothing and boots.
After contact with skin, wash immediately.

Respiratory protection
Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid</td>
</tr>
<tr>
<td>Odour</td>
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</tr>
<tr>
<td>Odour Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>Melting point/Freezing Point</td>
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</tr>
<tr>
<td>Boiling Point</td>
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</tr>
<tr>
<td>Flash Point</td>
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</tr>
<tr>
<td>Evaporation Rate</td>
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<tr>
<td>Flammability (solid, gas)</td>
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<tr>
<td>Upper/Lower Flammability or Explosive limits</td>
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<tr>
<td>Vapour pressure</td>
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<tr>
<td>Relative Density</td>
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<tr>
<td>Solubility(ies)</td>
<td>Hot water, sl. EtOH</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
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<tr>
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<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Viscosity</td>
<td>no data available</td>
</tr>
<tr>
<td>Refractive Index</td>
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</table>

STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available
Conditions to avoid
no data available

Incompatible materials
Strong oxidizing agents and strong bases.

Hazardous decomposition products
May evolve carbon monoxide, carbon dioxide, and nitrogen oxides.

TOXICOLOGICAL INFORMATION

Acute toxicity
no data available

Skin corrosion/irritation
Causes skin irritation

Serious eye damage/eye irritation
Causes serious eye irritation

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
no data available

Reproductive toxicity
no data available

STOT-single exposure
May cause respiratory irritation

STOT-repeated exposure
no data available

Aspiration hazard
no data available

Exposure Routes
Irritating to skin, eyes, and respiratory system. May have harmful effects if inhaled or swallowed.

To the best of our knowledge, the health hazards of this material have not been fully investigated.

ECOLOGICAL INFORMATION

Toxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential

N,N-Diethyl-N'-1-naphthylethylenediamine oxalate
SAFETY DATA SHEET

95+% Avoid breathing dust/fume/gas/mist/vapours/spray.

Harmful if swallowed

Causes serious eye irritation

Causes skin irritation

332.40 g/mol

Hot water, sl. EtOH

CONCENTRATION

N-(2-Diethylaminoethyl)-1-naphthylamine oxalate, Tsuda's Reagent

DESCRIPTION

N,N-Diethyl-N'-1-naphthylethylenediamine oxalate

PDSD

OTHER INFORMATION

Print Date: 11/05/2019

DISPONAL CONSIDERATIONS

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and local laws.

TRANSPORT INFORMATION

DOT
Classed non-hazardous for shipping.

IMDG
Classed non-hazardous for shipping.

IATA
Classed non-hazardous for shipping.

REGULATORY INFORMATION

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

New Jersey Right to Know Components
This product may contain a chemical on the New Jersey Right to Know Components List.

CAS
N,N-Diethyl-N'-1-naphthylethylenediamine oxalate 29473-53-8

California Prop. 65 Components
This product may contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

OTHER INFORMATION

Version: 1.3

Revision Date: 11/19/2014

The above information is believed to be correct but does not purport to be all-inclusive and shall be used
SAFETY DATA SHEET

95+%
N-(2-Diethylaminoethyl)-1-naphthylamine oxalate, Tsuda's Reagent
no data available
29473-53-8
no data available
no data available
164°C
no data available
Solid
Causes serious eye irritation
Harmful if swallowed
no data available
Causes skin irritation
If in eyes: Rinse cautiously with water for several minutes. Remove
no data available
Concentration:
no data available
no data available

N,N-Diethyl-N’-1-naphthylethylenediamine oxalate

only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from contact with the above product.