SIGMA-ALDRICH

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SAFETY DATA SHEET

Version 4.2 Revision Date 07/01/2014 Print Date 11/09/2018

1. PRODUCT AND COMPANY IDENTIFICATION 1.1 **Product identifiers** Product name N,N'-(1,3-Phenylene)dimaleimide Product Number 160458 Brand Aldrich CAS-No. 3006-93-7 ÷ 1.2 Relevant identified uses of the substance or mixture and uses advised against : Laboratory chemicals, Manufacture of substances Identified uses Details of the supplier of the safety data sheet 1.3 Company Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA +1 800-325-5832 Telephone Fax +1 800-325-5052 1.4 **Emergency telephone number** Emergency Phone # : +1-703-527-3887 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 2), H330 Acute toxicity, Dermal (Category 3), H311

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word



Danger

| | Danger |
|---|---|
| Hazard statement(s) H302 H311 H330 | Harmful if swallowed. Toxic in contact with skin. Fatal if inhaled. |
| Precautionary statement(s) P260 P264 P270 P271 P280 P284 P301 + P312 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing. Wear respiratory protection. IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. |

| P302 + P352 P304 + P340 | IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
|----------------------------|--|
| P310 | Immediately call a POISON CENTER or doctor/ physician. |
| P320 | Specific treatment is urgent (see supplemental first aid instructions on this label). |
| P330 | Rinse mouth. |
| P361 | Remove/Take off immediately all contaminated clothing. |
| P363 | Wash contaminated clothing before reuse. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

| l ₂ 04 |
|-------------------|
| j/mol |
| -7 |
| -8 |
| g/mol -7 |

Hazardous components

| Component | Classification | Concentration |
|---------------------------------|--|---------------|
| N,N'-(1,3-Phenylene)dimaleimide | | |
| | Acute Tox. 4; Acute Tox. 2; Acute Tox. 3; H302, H311, H330 | - |

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture Carbon oxides, nitrogen oxides (NOx)

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

- 6.3 Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| a) | Appearance | Form: powder Colour: yellow |
|----|--|---|
| b) | Odour | no data available |
| c) | Odour Threshold | no data available |
| d) | рН | no data available |
| e) | Melting point/freezing point | Melting point/range: 198 - 201 °C (388 - 394 °F) - lit. |
| f) | Initial boiling point and boiling range | no data available |
| g) | Flash point | no data available |
| h) | Evapouration rate | no data available |
| i) | Flammability (solid, gas) | no data available |
| j) | Upper/lower flammability or explosive limits | no data available |
| k) | Vapour pressure | no data available |
| I) | Vapour density | no data available |
| m) | Relative density | no data available |
| n) | Water solubility | no data available |
| o) | Partition coefficient: n- octanol/water | no data available |
| p) | Auto-ignition temperature | no data available |
| q) | Decomposition temperature | no data available |
| r) | Viscosity | no data available |
| s) | Explosive properties | no data available |
| t) | Oxidizing properties | no data available |
| | her safety information data available | |

10. STABILITY AND REACTIVITY

10.1 Reactivity no data available

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions no data available

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10.4 Conditions to avoid no data available

10.5 Incompatible materials Strong oxidizing agents

10.6 Hazardous decomposition products Other decomposition products - no data available In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - mouse - 250 mg/kg

LD50 Oral - rat - 1,370 mg/kg LC50 Inhalation - rat - 4 h - 55 mg/m3

.

no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitisation no data available

Germ cell mutagenicity

no data available

Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard

no data available

Additional Information RTECS: ON6125000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity no data available
- 12.2 Persistence and degradability no data available
- **12.3 Bioaccumulative potential** no data available
- 12.4 Mobility in soil no data available
- 12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 2811 Class: 6.1 Packing group: II Proper shipping name: Toxic solids, organic, n.o.s. (N,N'-(1,3-Phenylene)dimaleimide) Marine pollutant: No Poison Inhalation Hazard: No

IMDG

UN number: 2811 Class: 6.1 Packing group: II EMS-No: F-A, S-A Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (N,N'-(1,3-Phenylene)dimaleimide) Marine pollutant: No

ΙΑΤΑ

UN number: 2811 Class: 6.1 Packing group: II Proper shipping name: Toxic solid, organic, n.o.s. (N,N'-(1,3-Phenylene)dimaleimide)

15. 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: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

CAS-No.

Revision Date

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| N,N'-(1,3-Phenylene)dimaleimide | 3006-93-7 | |
|-------------------------------------|----------------------|---------------|
| New Jersey Right To Know Components | | Devision Data |
| N,N'-(1,3-Phenylene)dimaleimide | CAS-No. 3006-93-7 | Revision Date |
| | | |

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

| Acute Tox. H302 | Acute toxicity Harmful if swallowed. |
|--------------------|---|
| H311 | Toxic in contact with skin. |
| H330 | Fatal if inhaled. |

0

HMIS Rating

| Health hazard: | 3 | |
|------------------------|---|--|
| Chronic Health Hazard: | | |
| Flammability: | 0 | |
| Physical Hazard | 0 | |
| NFPA Rating | | |
| Health hazard: | 4 | |
| Fire Hazard: | 0 | |
| | | |

Further information

Reactivity Hazard:

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Preparation Information

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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