1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** Proton-sponge®
**Product Number:** 158496
**Brand:** Aldrich
**Supplier:** Sigma-Aldrich
3550 Spruce Street
SAINT LOUIS MO 63103
USA
**Telephone:** +1 800-335-5832
**Fax:** +1 800-325-5052
**Emergency Phone # (For both supplier and manufacturer):** (314) 776-6555
**Preparation Information:** Sigma-Aldrich Corporation
Product Safety - Americas Region
1-800-521-8956

2. HAZARDS IDENTIFICATION

**Emergency Overview**

**OSHA Hazards**

- Harmful by ingestion, irritant

**GHS Classification**

- Acute toxicity, Oral (Category 4)
- Skin irritation (Category 2)
- Eye irritation (Category 2A)
- Specific target organ toxicity - single exposure (Category 3)

**GHS Label elements, including precautionary statements**

**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):**

- P233: Avoid breathing dust/ fume/ gas/ mist/ vapour/ 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.

**HMIS Classification**

- Health hazard: 2
- Flammability: 1
- Physical hazards: 0

**NFPA Rating**

- Health hazard: 2

3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonyms:** N,N,N',N'-Tetramethylnaphthalenediamine
1,8-Bis(dimethylamino)naphthalene

**Formula:** C24H18N2

**Molecular Weight:** 214.31 g/mol

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<th>Component</th>
<th>Concentration</th>
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<td>N,N,N',N'-Tetramethylnaphthalene-1,8-diamine</td>
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**CAS-No.:** 20734-58-1
**EC-No.:** 244-001-6

4. FIRST AID MEASURES

**General advice**

Consult a physician. Show this safety data sheet to a 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. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

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

5. FIREFIGHTING MEASURES

**Conditions of flammability**

Not flammable or combustible.

**Suitable extinguishing media**

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

**Special protective equipment for fire fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**

Do not let product enter drains.

**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.
7. HANDLING AND STORAGE

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.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Light sensitive. Store under inert gas. Air sensitive.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/A/GP99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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.

Immersion protection
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: > 480 min
Material tested: Viton® (Aldrich Z077698, Size M)

Splash protection
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: > 30 min
Material tested: Camstat® (Aldrich Z077442, Size M)

data source: KCL GmbH, D-38124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de, test method: EN374

Eye protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(b-UE).

Skin and 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.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form: crystalline
Colour: light red

Safety data

pH: no data available
Melting point/freezing point: 49 - 51 °C (120 - 124 °F) - lt.
Boiling point: no data available
Flash point: 113 °C (235 °F) - closed cup
Ignition temperature: no data available
Autoignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Vapour pressure: no data available
Density: no data available
Water solubility: no data available
Partition coefficient: n-octanol/water: no data available
Relative vapour density: no data available
Odour: no data available
Odour Threshold: no data available
Evaporation rate: no data available

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
no data available

Materials to avoid
Acids, Acid chlorides, Acid anhydrides, Oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Oral LD50
no data available
Inhalation LC50
no data available
Dermal LD50
no data available

Other information on acute toxicity

Skin corrosion/irritation
no data available

Aldrich - 158498
Delivery 5845720285-900040 Purchase Order 970

Aldrich - 158498
Delivery 5845720285-900040 Purchase Order 970
13. DISPOSAL CONSIDERATIONS

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards
Harmful by Ingestion, Irritant

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

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New Jersey Right To Know Components

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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

Further Information
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.