Material Safety Data Sheet

Version 5.0 Revision Date 10/31/2012 Print Date 03/19/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product name **Diazald®**

Product Number D28000 Brand Aldrich

Supplier Sigma-Aldrich

> 3050 Spruce Street SAINT LOUIS MO 63103

USA

+1 800-325-5832 Telephone Fax +1 800-325-5052 Emergency Phone # (For (314) 776-6555

both supplier and

manufacturer)

Preparation Information Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Skin sensitiser, Irritant, Explosive

GHS Classification

Self reactive substances (Type C) Acute toxicity, Oral (Category 5) Skin irritation (Category 2) Eye irritation (Category 2A) Skin sensitization (Category 1)

Specific target organ toxicity - single exposure (Category 3)

GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H242 Heating may cause a fire. H303 May be harmful if swallowed. H315

Causes skin irritation.

May cause an allergic skin reaction. H317 H319 Causes serious eye irritation. May cause respiratory irritation. H335

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P280 Wear protective gloves.

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: 0 Physical hazards: 3

NFPA Rating

2 Health hazard: Fire: 0 Reactivity Hazard: 3

Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation. May be harmful if inhaled.

Causes respiratory tract irritation.

Skin May be harmful if absorbed through skin. Causes skin irritation. May be harmful if

absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation. Causes eye irritation.

Ingestion May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Diazomethane precursor

> N-Methyl-N-nitroso-p-toluenesulfonamide N-Nitroso-N-methyl-p-toluenesulfonamide N-Methyl-N-(p-tolylsulfonyl)nitrosamide N-Nitroso-p-toluenesulfomethylamide

p-Tolylsulfomethylnitrosamide

Formula $C_8H_{10}N_2O_3S$ 214.24 g/mol Molecular Weight

Component		Concentration
N-Methyl-N-nitrosotoluene-4-sulphonamide		
CAS-No.	80-11-5	-
EC-No.	201-252-6	

4. FIRST AID MEASURES

General advice

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

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

Suitable extinguishing media

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

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Aldrich - D28000 Page 2 of 7

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

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

Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

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. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

Conditions for safe storage

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

hygroscopic

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

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).

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.

Eye 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 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. Use only with adequate ventilation. 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 solid

Colour light yellow

Safety data

pH no data available

Melting Melting point/range: 61 - 62 °C (142 - 144 °F)

Aldrich - D28000 Page 3 of 7

point/freezing point

Boiling point no data available Flash point no data available Ignition temperature no data available Autoignition no data available

temperature

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

no data available

density

Odour no data available Odour Threshold no data available Evaporation rate no data available

10. STABILITY AND REACTIVITY

Chemical stability

Unstable. Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

Heat, flames and sparks.

Materials to avoid

Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents

Hazardous decomposition products

Hazardous decomposition products - Diazomethane, Carbon monoxide, Carbon dioxide (CO2), nitrogen oxides (NOx), Sulphur oxides

Other decomposition products - no data available

Thermal decomposition

Type C

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50

LD50 Oral - rat - 2,700 mg/kg

Inhalation LC50

Dermal LD50

no data available

Other information on acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Aldrich - D28000 Page 4 of 7

Respiratory or skin sensitization

May cause allergic skin reaction.

Germ cell mutagenicity

Genotoxicity in vitro - rat - Liver Unscheduled DNA synthesis

Carcinogenicity

Carcinogenicity - mouse - Intraperitoneal

Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration:Tumors. Blood:Lymphomas including Hodgkin's disease.

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

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation. May be harmful if inhaled.

Causes respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. Causes skin irritation. May be harmful if absorbed

through skin. Causes skin irritation.

Eyes Causes eye irritation. Causes eye irritation.

Signs and Symptoms of Exposure

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

Synergistic effects

no data available

Additional Information

RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Aldrich - D28000 Page 5 of 7

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. 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)

UN number: 3224 Class: 4.1 Packing group: II

Proper shipping name: Self-reactive solid type C (Self-reactive solid, sample)

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN number: 3234 Class: 4.1 EMS-No: F-F, S-K

Proper shipping name: SELF-REACTIVE SOLID TYPE C, TEMPERATURE CONTROLLED (N-Methyl-N-nitroso-p-

methylbenzenesulfonamide)

Marine pollutant: No

IATA

UN number: 3234 Class: 4.1

Proper shipping name: Self-reactive solid type C, temperature controlled (N-Methyl-N-nitroso-p-

methylbenzenesulfonamide)

IATA Passenger: Not permitted for transport IATA Cargo: Not permitted for transport

15. REGULATORY INFORMATION

OSHA Hazards

Skin sensitiser, Irritant, Explosive

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

N-Methyl-N-nitrosotoluene-4-sulphonamide CAS-No. Revision Date 80-11-5

New Jersey Right To Know Components

CAS-No. Revision Date

Aldrich - D28000 Page 6 of 7

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

Copyright 2012 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. 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.

Aldrich - D28000 Page 7 of 7