

SAFETY DATA SHEET

Preparation Date: 4/5/2018

Revision Date: 4/5/2018

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: M2272
Product Name: N-METHYL-N-NITROSO-P-TOLUENESULFONAMIDE

Other means of identification

Synonyms: Benzenesulfonamide, N,4-dimethyl-N-nitroso-
 Diazald
 Diazale
 N-Nitroso-N-methyl-4-tolylsulfonamide
 Methylnitroso-p-toluenesulfonamide
 N-Methyl-N-nitroso-p-toluenesulfonamide
 p-Tolylsulfonylmethylnitrosamide
 Toluene-p-sulfonylmethylnitrosamide

CAS #: 80-11-5
RTECS # XT5950000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: In lab preparation of Diazomethane.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Self-reactive substances and mixtures	Type C

Label elements

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Product name:
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 SULFONAMIDE

Danger

Hazard statements

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause respiratory irritation
Heating may cause a fire



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

May be harmful in contact with skin

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves
Wear eye/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing must not be allowed out of the workplace
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep/Store away from clothing and other combustible materials
Keep only in original container
Keep cool

Precautionary Statements - Response

In case of fire: Use CO₂, dry chemical, or foam to extinguish.
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: Wash with plenty of water
Take off contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up
Store at temperatures not exceeding 8 °C/46.4 °F. Keep cool
Store away from other materials

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	100

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4. FIRST AID MEASURES

First aid measures

General Advice:	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms	Causes eye irritation Moderately irritating to the eyes Redness and pain of the eyes Contact causes skin irritation Moderate skin irritation May cause itching and redness of the skin Irritating to respiratory system May cause coughing and shortness of breath Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea May cause an allergic skin reaction
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Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO₂). Water spray mist or foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon Monoxide, Carbon Dioxide. Nitrogen Oxides. Sulfur Oxides.

Specific hazards: May be combustible at high temperatures. Heating may cause fire.

Special Protective Actions for Firefighters

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Specific Methods:	No information available.
Special Protective Equipment for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid dust formation. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent from entering into soil, ditches, sewers, waterways, and/or ground water.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Hygroscopic. Protect from moisture. Keep containers tightly closed in a cool, well-ventilated place. Keep refrigerated. Store at 2-8 deg. C. Store away from incompatible materials.

Incompatible Materials:

- Strong acids
- Strong bases
- Strong oxidizing agents
- Strong reducing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

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Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WEEL
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	None	None	None	None

Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles

Skin and body protection: Long sleeved clothing
Chemical resistant apron
Gloves

Respiratory protection: Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:

Solid

Appearance:

Powder.

Color:

Yellow. Light yellow.

Odor:

None.

Taste

No information available.

Formula:

C₈H₁₀N₂O₃S

Molecular/Formula weight:

214.24

Flammability:

No information available

Flashpoint (°C/°F):

No information available.

Flash Point Tested according to:

Not applicable

Autoignition Temperature (°C/°F):

No information available

Lower Explosion Limit (%):

No information available

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Upper Explosion Limit (%):
No information available

Melting point/range(°C/°F):
58-62 °C/136.4-144 °F

Decomposition temperature(°C/°F):
No information available

Boiling point/range(°C/°F):
No information available

Bulk density:
No information available

Density (g/cm³):
No information available

Specific gravity:
No information available

pH:
No information available

Vapor pressure @ 20°C (kPa):
No information available

Evaporation rate:
No information available

Vapor density:
No information available

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

**Partition coefficient
(n-octanol/water):**
No information available

Viscosity:
No information available

Miscibility:
No information available

Solubility:
Insoluble in water
Soluble in Chloroform
Soluble in Carbon tetrachloride
Soluble in Ether
Soluble in Benzene
Soluble in Petroleum Ether

10. STABILITY AND REACTIVITY

Reactivity

No information available

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Avoid dust formation. Exposure to moisture. Exposure to moist air. Incompatible materials.

Incompatible Materials: Strong acids
Strong bases
Strong oxidizing agents
Strong reducing agents

Hazardous decomposition products: Carbon monoxide. Carbon dioxide. Nitrogen oxides (NO_x). Sulfur oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

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Ingestion. Inhalation.

Acute Toxicity

Component Information

N-Methyl-N-nitroso-p-toluenesulfonamide	
CAS-No.	80-11-5

LD50/oral/rat = 2700 mg/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 2700 mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin irritation. Moderately irritating to the skin.
Eye Contact: Causes serious eye irritation. Moderately irritating to the eyes.
Inhalation Irritating to respiratory system. Symptoms may include coughing and shortness of breath.
Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Skin: Sensitizer. May cause allergic skin reaction (allergic contact dermatitis). Repeated or prolonged skin contact may cause skin sensitization.

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Sensitization: May cause sensitization by skin contact.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure Respiratory system.

STOT - repeated exposure No information available.

Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN3224
Proper Shipping Name: Self-reactive solid type C
Hazard Class: 4.1
Subsidiary Class: No information available
Packing group: II
Emergency Response Guide Number: 149
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): No information available
Description: UN3224, Self-reactive solid type C, 4.1

TDG (Canada)

UN-No: UN3224
Proper Shipping Name: Self-reactive solid type C
Hazard Class: 4.1
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant: No Information available
Description: UN3224, Self-reactive solid type C, 4.1, II

ADR

UN-No: UN3224
Proper Shipping Name: Self-reactive solid type C
Hazard Class: 4.1
Packing Group: II
Subsidiary Risk: No information available
Special Provisions: 194, 274
Description: UN3224, Self-reactive solid type C, 4.1

IMO / IMDG

UN-No: UN3224
Proper Shipping Name: Self-reactive solid type C
Hazard Class: 4.1
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant: No information available
EMS: F-J
Special Provisions: 274
Description: UN3224, Self-reactive solid type C (N-METHYL-N-NITROSO-P-TOLUENESULFONAMIDE), 4.1

RID

UN-No: UN3224
Proper Shipping Name: Self-reactive solid type C
Hazard Class: 4.1
Subsidiary Risk: No information available
Packing Group: II

Product code: M2272

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Special Provisions 194, 274
Description: UN3224, Self-reactive solid type C, 4.1

ICAO

UN-No: UN3224
Proper Shipping Name: Self-reactive solid type C
Hazard Class: 4.1
Subsidiary Risk: No information available
Packing Group: II
Description: UN3224, Self-reactive solid type C, 4.1
Special Provisions A20

IATA

UN-No: UN3224
Proper Shipping Name: Self-reactive solid type C
Hazard Class: 4.1
Subsidiary Risk: No information available
Packing Group: II
ERG Code: 3L
Special Provisions No information available
Description: UN3224, Self-reactive solid type C, 4.1

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>N-Methyl-N-nitroso-p-toluenesulfonamide</i>	80-11-5	Present	Present KE-11559	Present	Not present	Present	Not present	Present 201-252-6

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
<i>N-Methyl-N-nitroso-p-toluenesulfonamide</i>	80-11-5	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
<i>N-Methyl-N-nitroso-p-toluenesulfonamide</i>	80-11-5	None	None	None	None	None

U.S. TSCA

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Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: The WHMIS 2015 classification of this product has not been validated or reviewed yet.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

The classification of this product has not been validated yet

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	Present	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Components	CAS-No.	EU GHS - SV - CLP (1272/2008)
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5	No information

EU - CLP (1272/2008)

R-phrases(s)

Not determined

S -phrase(s)

none

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
N-Methyl-N-nitroso-p-toluenesulfonamide	80-11-5		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

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Indication of danger:
not determined

16. OTHER INFORMATION

Preparation Date: 4/5/2018
Revision Date: 4/5/2018
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet