



Material Safety Data Sheet
N-Nitrosodimethylamine, 99+%

MSDS# 05254

Section 1 - Chemical Product and Company Identification

MSDS Name: N-Nitrosodimethylamine, 99+%

Catalog Numbers: AC128960000, AC128960050, AC128960250

Synonyms: Dimethylnitrosamine; Dimethylnitrosoamine; DMN; DMNA; N,N-Dimethylnitrosamine; N-Methyl-N-nitrosomethanamine; N-Nitroso-N,N-dimethylamine; N-Nitrosodimethylamine; NDMA; Nitrosodimethylamine.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Company Identification: (USA) Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 62-75-9

Chemical Name: N-Nitrosodimethylamine

%: >99

EINECS#: 200-549-8

Hazard Symbols:



Risk Phrases:

T+ N



45 25 26 48/25 51/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Combustible liquid and vapor. Dangerous for the environment. Light sensitive. Cancer suspect agent. May cause central nervous system depression. May cause liver and kidney damage. May cause reproductive and fetal effects. May be fatal if inhaled, absorbed through the skin or swallowed. This product contains N-Nitrosodimethylamine, a chemical known to the state of California to cause cancer. Target Organs: Kidneys, central nervous system, liver, lungs.

Potential Health Effects

Eye: Causes eye irritation. May cause chemical conjunctivitis and corneal damage.

Skin: May cause irritation and dermatitis. May cause cyanosis of the extremities.

Ingestion: May be fatal if swallowed. May cause headache, fever, nausea, abdominal pain, muscle pain and bloody urine.

- Inhalation: Aspiration may lead to pulmonary edema. Inhalation at high concentrations may cause CNS depression and asphyxiation.
- Chronic: Prolonged or repeated exposure may cause changes in the esophagus, ulceration, and bleeding from the small or large intestine.

Section 4 - First Aid Measures

- Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
- Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.
- Ingestion: Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water. Induce vomiting only when instructed to do so by a physician.
- Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- Notes to Physician:

Section 5 - Fire Fighting Measures

- General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Use water spray to keep fire-exposed containers cool. Combustible liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.
- Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use water spray to cool fire-exposed containers.
- Autoignition Temperature: Not applicable.
- Flash Point: 61 deg C (141.80 deg F)
- Explosion Limits: Lower: Not available
- Explosion Limits: Upper: Not available
- NFPA Rating: health: 3; flammability: 2; instability: 0;

Section 6 - Accidental Release Measures

- General Information: Use proper personal protective equipment as indicated in Section 8.
- Spills/Leaks: Wash area with soap and water. Cover with sand, dry lime or soda ash and place in a closed container for disposal. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation.

Section 7 - Handling and Storage

- Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale. Store protected from light. Use only in a chemical fume hood. Discard contaminated shoes. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.
- Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from light.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
N-Nitrosodimethylamine	Skin - potential significant contribution to	none listed	(Cancer suspect agent - see 29 CFR 1910.1003)

	overall exposure	
	by the cutaneous	
	route	

OSHA Vacated PELs: N-Nitrosodimethylamine: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. See 29CFR 1910.1003 for specific regulatory requirements applying to areas containing a listed carcinogen, signs, training, reports, and medical surveillance programs.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Color: Clear

Odor: characteristic odor

pH: Not available

Vapor Pressure: 3 mm Hg @ 25 deg C

Vapor Density: 2.56

Evaporation Rate: Not available

Viscosity: Low

Boiling Point: 153 deg C @ 774 mmHg (307.40°F)

Freezing/Melting Point: Not available

Decomposition Temperature: Not available

Solubility in water: soluble

Specific Gravity/Density: 1.0060g/cm3

Molecular Formula: C2H6N2O

Molecular Weight: 74.08

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. May decompose on exposure to ultraviolet light.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat, ultra violet light.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 62-75-9: IQ0525000

RTECS:

CAS# 62-75-9: Inhalation, mouse: LC50 = 57 ppm/4H;

LD50/LC50: Inhalation, rat: LC50 = 78 ppm/4H;

Oral, rat: LD50 = 37 mg/kg;

Other: Oral, woman: LDLo = 20 mg/kg/2.5Y. (ulceration and bleeding of small intestine, nausea,

N-Nitrosodimethylamine - ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Carcinogenicity: Humans California: carcinogen, initial date 10/1/87 NTP: Suspect carcinogen IARC: Group 2A carcinogen

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Please contact Fisher Scientific for shipping information

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

USA RQ: CAS# 62-75-9: 10 lb final RQ; 4.54 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T+ N

Risk Phrases:

R 45 May cause cancer.

R 25 Toxic if swallowed.

R 26 Very toxic by inhalation.

R 48/25 Toxic : danger of serious damage to health by prolonged exposure if swallowed.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 62-75-9: Not available

Canada

CAS# 62-75-9 is listed on Canada's NDSL List

Canadian WHMIS Classifications: B3, D1A, D2A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 62-75-9 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 62-75-9 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 9/02/1997

Revision #10 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.
