



Material Safety Data Sheet

1,3-Diaminopropane

MSDS# 05189

Section 1 - Chemical Product and Company Identification

MSDS Name: 1,3-Diaminopropane

Catalog Numbers: AC112350000, AC112350010, AC112352500, AC219800000, AC219801000, AC219805000

Synonyms: 1,3-Propanediamine.

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#: 109-76-2
Chemical Name: 1,3-Diaminopropane
%: 99+
EINECS#: 203-702-7

Hazard Symbols: T



Risk Phrases: 10 22 24 35

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Flammable liquid and vapor. Hygroscopic (absorbs moisture from the air). Harmful if swallowed. Causes burns by all exposure routes. Toxic if absorbed through the skin. Target Organs: Respiratory system, gastrointestinal system, eyes, skin.

Potential Health Effects

Eye: Causes eye burns.

Skin: Causes skin burns. Toxic in contact with skin.

Ingestion: Harmful if swallowed. Causes gastrointestinal tract burns.

Inhalation: May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract. May be harmful if inhaled.

Chronic: Adverse reproductive effects have been reported in animals.

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:	POISON material. In case of contact, get medical aid immediately. Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.
Ingestion:	Do not induce vomiting. Get medical aid immediately. Call a poison control center.
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:	Treat symptomatically and supportively.

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. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Containers may explode in the heat of a fire. Flammable liquid and vapor.
Extinguishing Media:	Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide. If water is the only media available, use in flooding amounts.
Autoignition Temperature:	350 deg C (662.00 deg F)
Flash Point:	48 deg C (118.40 deg F)
Explosion Limits: Lower:	2.8 vol %
Explosion Limits: Upper:	15.2 vol %
NFPA Rating:	health: 3; flammability: 2; instability: 1;

Section 6 - Accidental Release Measures

General Information:	Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:	Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling:	Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.
Storage:	Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1,3-Diaminopropane	none listed	none listed	none listed

OSHA Vacated PELs: 1,3-Diaminopropane: None listed

Engineering Controls:

Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

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.
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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: Liquid

Color: clear, colorless - APHA: 20 max

Odor: amine-like

pH: > 12 (111 g/L aq.sol.)

Vapor Pressure: 7 mbar @ 20 deg C

Vapor Density: 2.6 (air=1)

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 140 deg C @ 760 mm Hg (284.00°F)

Freezing/Melting Point: -12 deg C (10.40°F)

Decomposition Temperature: Not available

Solubility in water: Soluble

Specific Gravity/Density: 0.880

Molecular Formula: C3H10N2

Molecular Weight: 74.13

Section 10 - Stability and Reactivity

Chemical Stability: Hygroscopic: absorbs moisture or water from the air.
Conditions to Avoid: Incompatible materials, ignition sources, excess heat, exposure to moist air or water.
Incompatibilities with Other Materials: Strong oxidizing agents, acids, carbon dioxide, acid anhydrides, acid chlorides.
Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 109-76-2: TX6825000

RTECS:

CAS# 109-76-2: Draize test, rabbit, eye: 1 mg Severe;

LD50/LC50: Oral, rat: LD50 = 350 uL/kg;
Skin, rabbit: LD50 = 200 uL/kg;

Other: Oral, rat: LD50 = 350 uL/kg = 308 mg/kg.; Skin, rabbit: LD50 = 200 uL/kg = 176 mg/kg.

Carcinogenicity: 1,3-Diaminopropane - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: Do not empty into drains.

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT

Shipping Name: AMINES, LIQUID, CORROSIVE, FLAMMABLE, N.O.S.

Hazard Class: 8

UN Number: UN2734

Packing Group: II

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 10 Flammable.

R 22 Harmful if swallowed.

R 24 Toxic in contact with skin.

R 35 Causes severe burns.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

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

WGK (Water Danger/Protection)

CAS# 109-76-2: 2

Canada

CAS# 109-76-2 is listed on Canada's DSL List

Canadian WHMIS Classifications: B3, D1A, E

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# 109-76-2 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 109-76-2 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 4/27/1999

Revision #7 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.
