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Language: EN
Country:
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**** MATERIAL SAFETY DATA SHEET ****
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Spermidine, 99%

\*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: Spermidine, 99%

Catalog Numbers:

13274-0000, 13274-0010, 13274-0050

Synonyms:

N-(3-Aminopropyl)-1,4-butanediamine

Company Identification (Europe): Acros Organics BVBA

Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium Acros Organics

Company Identification (USA):

One Reagent Lane Fairlawn, NJ

For information in North America, call: 800-ACROS-01 For information in Europe, call: 0032(0) 14575211 For emergencies in the US, call CHEMTREC: 800-424-9300 For emergencies in Europe, call: 0032(0) 14575299

\*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

1	CAS#	Chemical Name	8	EINECS#	Haz Symbols	Risk Phrases	
	124-20-9	Spermidine	99%	204-689-0			_

Hazard Symbols: C Risk Phrases: 34

\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

EMERGENCY OVERVIEW

Causes burns. Air sensitive. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye:

Causes eye burns.

Causes skin burns.

Ingestion:

Causes gastrointestinal tract burns.

Inhalation:

Causes chemical burns to the respiratory tract.

Chronic:

Not available.

\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\*

Eves:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Indestion:

Do not induce vomiting. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use foam, dry chemical, or carbon dioxide.

\*\*\*\* 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.

\*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\*

Handling:

Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

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Store in a tightly closed container. Store in a dry area. Keep
           refrigerated. (Store below 4°C/39°F.) Store under an inert
           atmosphere.
           **** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****
     Engineering Controls:
           Facilities storing or utilizing this material should be equipped
           with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.
     Personal Protective Equipment
                   Eyes:
                          Wear chemical goggles.
                   Skin:
                          Wear appropriate protective gloves to prevent skin
                          exposure.
               Clothing:
                          Wear appropriate protective clothing to prevent skin
                          exposure.
           Respirators:
                          Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use
                          a NIOSH or European Standard EN 149 approved
                          respirator when necessary.
               **** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****
Physical State:
                                Clear liquid
Color:
                                colorless
Odor:
                                None reported.
pH:
                                Not available.
Vapor Pressure:
                                Not available.
Viscosity:
Boiling Point:
                                Not available.
                                128 - 130 deg C @14mmHg
22 - 25 deg C
Freezing/Melting Point:
Autoignition Temperature:
                                Not available.
                                > 110 deg C (> 230.00 deg F)
Not available.
Flash Point:
Explosion Limits, lower: Explosion Limits, upper:
                                Not available.
Decomposition Temperature: Solubility in water:
                                Soluble.
Specific Gravity/Density:
                                0.925
Molecular Formula:
                                C7H19N3
Molecular Weight:
                                145.25
                   **** SECTION 10 - STABILITY AND REACTIVITY ****
     Chemical Stability:
     Stable under normal temperatures and pressures. Conditions to Avoid:
           Incompatible materials, exposure to air, exposure to moist air or
     Incompatibilities with Other Materials:
           Strong oxidizing agents, oxidizing agents, acids, acid chlorides,
           acid anhydrides.
     Hazardous Decomposition Products:
           Nitrogen oxides, carbon monoxide, carbon dioxide.
     Hazardous Polymerization: Will not occur.
                  **** SECTION 11 - TOXICOLOGICAL INFORMATION ****
     RTECS#:
           CAS# 124-20-9: EJ7000000
     LD50/LC50:
           Not available.
     Carcinogenicity:
        Spermidine
           Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
See actual entry in RTECS for complete information.
                     **** SECTION 12 - ECOLOGICAL INFORMATION ****
                    **** SECTION 13 - DISPOSAL CONSIDERATIONS ****
Dispose of in a manner consistent with federal, state, and local regulations.
                    **** SECTION 14 - TRANSPORT INFORMATION ****
     IATA
           Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.* Hazard Class: 8
                UN Number: 2735
           Packing Group: II
     TMO
           Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. Hazard Class: 8
UN Number: 2735
           Packing Group: II
     RID/ADR
           Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. Hazard Class: 8
               UN Number: 2735
           Packing group: II
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Storage:

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European/International Regulations
     European Labeling in Accordance with EC Directives
            Hazard Symbols: C
            Risk Phrases:
                             R 34 Causes burns.
            Safety Phrases:
                             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# 124-20-9: 1
United Kingdom Occupational Exposure Limits
  United Kingdom Maximum Exposure Limits
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CAS# 124-20-9 is listed on Canada's DSL List. CAS# 124-20-9 is not listed on Canada's Ingredient Disclosure List. Exposure Limits US FEDERAL

TSCA

CAS# 124-20-9 is listed on the TSCA inventory.

\*\*\*\* SECTION 16 - ADDITIONAL INFORMATION \*\*\*\*

MSDS Creation Date: 7/16/1996 Revision #1 Date: 1/27/2004

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 way 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.