

Revision Date 27-Feb-2012

Revision Number 4

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product Identifier

Product Description:

Cat No.

Synonyms

Spermidine

132740000; 132740010; 132740050; 132740250; 132741000

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

### Relevant identified uses of the substance or mixture and uses advised against

Recommended Use

Laboratory chemicals

Uses advised against

No Information available

### Details of the supplier of the safety data sheet

#### Company

Acros Organics BVBA

Janssen Pharmaceuticaaan 3a

2440 Geel, Belgium

E-mail address

begel.sdsdesk@thermofisher.com

### Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01

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

Emergency Number, Europe: +32 14 57 52 99

Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300

CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

REGULATION (EC) No 1272/2008

|                                   |              |
|-----------------------------------|--------------|
| Skin Corrosion/Irritation         | Category 1 B |
| Serious Eye Damage/Eye Irritation | Category 1   |

### Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s)

C - Corrosive

R-phrases

R34 - Causes burns

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## SECTION 2. HAZARDS IDENTIFICATION

### Label Elements



### Signal Word

**Danger**

### Hazard Statements

H314 - Causes severe skin burns and eye damage

### Precautionary Statements - EU (§28, 1272/2008)

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P280 - Wear eye protection/ face protection

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/ physician

### Other Hazards

No information available.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component                                         | EC-No.            | Weight % | CAS-No   | 67/548/EEC Classification | CLP Classification - Regulation (EC) No 1272/2008 | REACH No. |
|---------------------------------------------------|-------------------|----------|----------|---------------------------|---------------------------------------------------|-----------|
| 1,4-Butanediamine, N-(3-aminopropyl)-<br>124-20-9 | EEC No. 204-689-0 | 99       | 124-20-9 | C; R34                    | Skin Corr. 1B (H314)<br>Eye Dam. 1 (H318)         | -         |

**For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16**

## SECTION 4. FIRST AID MEASURES

### Description of first aid measures

#### Eye Contact

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

#### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

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|                    |                                                                                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ingestion          | Do not induce vomiting. Call a physician immediately.                                                                                                                              |
| Inhalation         | Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required. |
| Notes to Physician | Treat symptomatically                                                                                                                                                              |

## SECTION 5. FIRE-FIGHTING MEASURES

### Extinguishing media

#### **Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. alcohol-resistant foam. chemical foam.

#### **Extinguishing media which must not be used for safety reasons**

No information available.

### Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

### Environmental precautions

Prevent further leakage or spillage if safe to do so

### Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Do not breathe dust. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Use only in area provided with appropriate exhaust ventilation.

### Conditions for safe storage, including any incompatibilities

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Keep in a dry place. Keep container tightly closed. Store under an inert atmosphere. Keep refrigerated.

## Specific End Uses

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### Derived No Effect Level (DNEL)

No information available.

#### Predicted No Effect Concentration (PNEC)

No information available.

### Exposure controls

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

#### Personal protective equipment

##### Eye Protection

Goggles

##### Hand Protection

Protective gloves

##### Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

##### Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

#### Environmental exposure controls

No information available.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Physical State

Liquid

#### Appearance

Colorless

#### odor

odorless

#### pH

No information available.

#### Vapor Pressure

No information available.

#### Vapor Density

No information available.

#### Boiling Point/Range

128 - 130°C / 262.4 - 266°F@ 14 mmHg

#### Melting Point/Range

22 - 25°C / 71.6 - 77°F

#### Flash Point

> 110°C / > 230°F

#### Autoignition Temperature

No information available.

#### Water Solubility

soluble

#### Specific Gravity

0.925

#### Molecular Formula

C7 H19 N3

#### Molecular Weight

145.25

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## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

#### Chemical Stability

Stable under normal conditions. Hygroscopic. Air sensitive.

#### Possibility of Hazardous Reactions

##### **Hazardous Polymerization Hazardous Reactions .**

Hazardous polymerization does not occur.  
No information available.

#### Conditions to Avoid

Exposure to air, Incompatible products, Exposure to moist air or water.

#### Incompatible Materials

Acids, Strong oxidizing agents, Acid anhydrides, Acid chlorides.

#### Hazardous Decomposition Products

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Acute Toxicity

**Product Information** No acute toxicity information is available for this product

#### **Component Information**

#### Chronic Toxicity

**Carcinogenicity** There are no known carcinogenic chemicals in this product

#### **Sensitization**

No information available.

#### **Mutagenic Effects**

No information available

#### **Reproductive Effects**

No information available.

#### **Developmental Effects**

No information available.

#### **Target Organs**

No information available.

#### **Other Adverse Effects**

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information

#### **Endocrine Disruptor Information**

None known

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## SECTION 12. ECOLOGICAL INFORMATION

### Toxicity

#### **Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

### Persistence and degradability

No information available

### Bioaccumulative potential

No information available.

### Mobility in soil

No information available.

### Results of PBT and vPvB assessment

### Other adverse effects

No information available

## SECTION 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

#### **Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

#### **Contaminated Packaging**

Empty containers should be taken to local recyclers for disposal

## SECTION 14. TRANSPORT INFORMATION

### IMDG/IMO

|                             |                                               |
|-----------------------------|-----------------------------------------------|
| <b>UN-No</b>                | UN3259                                        |
| <b>Hazard Class</b>         | 8                                             |
| <b>Packing Group</b>        | II                                            |
| <b>Proper Shipping Name</b> | Amines or polyamines, solid, corrosive, n.o.s |

### ADR

|                             |                                               |
|-----------------------------|-----------------------------------------------|
| <b>UN-No</b>                | UN3259                                        |
| <b>Hazard Class</b>         | 8                                             |
| <b>Packing Group</b>        | II                                            |
| <b>Proper Shipping Name</b> | Amines or polyamines, solid, corrosive, n.o.s |

### IATA

|                     |        |
|---------------------|--------|
| <b>UN-No</b>        | UN3259 |
| <b>Hazard Class</b> | 8      |

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## SECTION 14. TRANSPORT INFORMATION

Packing Group II  
 Proper Shipping Name Amines or polyamines, solid, corrosive, n.o.s

## SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

### International Inventories

| Component                             | EINECS    | ELINCS | NLP | TSCA | DSL | NDSL | PICCS | ENCS | CHINA | AICS | KECL |
|---------------------------------------|-----------|--------|-----|------|-----|------|-------|------|-------|------|------|
| 1,4-Butanediamine, N-(3-aminopropyl)- | 204-689-0 | -      |     | X    | X   | -    | X     | -    | -     | -    | X    |

### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**CHINA** - China Inventory of Existing Chemical Substances

**AICS** - Inventory of Chemical Substances

**KECL** - Existing and Evaluated Chemical Substances

### Chemical Safety Assessment

## SECTION 16. OTHER INFORMATION

### Full text of R-phrases referred to under sections 2 and 3

R34 - Causes burns

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Revision Summary

Reason for revision (M)SDS sections updated, 14.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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**SECTION 16. OTHER INFORMATION****Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet