



DATA SHEET

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

<u>Product Name:</u>	1,5-Diaminopentane 97%
<u>Product Code:</u>	D05700
<u>Supplier:</u>	Pfaltz & Bauer, Inc. 172 E. Aurora Street Waterbury, CT 06708 USA
<u>Phone:</u>	203 574-0075
<u>Fax:</u>	203 574-3181
<u>Emergency Phone:</u>	CHEMTREC, US: 1-800-424-9300 CHEMTREC, International: 1-703-527-3887

SECTION 2: COMPOSITION/INFORMATION on INGREDIENTS

<u>Chemical Name:</u>	1,5-Diaminopentane
<u>Synonyms:</u>	Cadaverine
<u>CAS Number:</u>	462-94-2
<u>MDL Number:</u>	MFCD00008239
<u>EC Number:</u>	207-329-0
<u>Molecular Formula:</u>	$H_2N(CH_2)_5NH_2$
<u>Molecular Weight:</u>	102.18

SECTION 3: HAZARDS IDENTIFICATION

<u>Acute Health Hazard:</u>	Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes skin and eye burns. May be harmful by ingestion, inhalation or skin absorption.
<u>Chronic Health Hazard:</u>	Not Available
<u>HMIS Rating:</u>	H:3 F:2 P:0
<u>NFPA Rating:</u>	H:3 F:2 P:0

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

SECTION 4: FIRST AID MEASURES

<u>Eye Contact:</u>	Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.
<u>Skin Contact:</u>	Take off contaminated clothing and shoes immediately. Wash skin with soap and water. If irritation persists, seek medical attention.
<u>Ingestion:</u>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Do not induce vomiting. Seek medical attention.
<u>Inhalation:</u>	Move to a fresh air environment. If not breathing give artificial respiration. Contact a physician if breathing becomes difficult.

SECTION 5: FIRE FIGHTING MEASURES

<u>Flash Point:</u>	62 °C
<u>Explosion Limits:</u>	Lower: Not Available Upper: Not Available
<u>Auto Ignition Temperature:</u>	Not Available
<u>Extinguishing Media:</u>	Carbon dioxide, water spray, dry chemical powder or alcohol-resistant foam.
<u>Protective Equipment:</u>	Wear self-contained respirator and fully protective impervious suit.
<u>Specific Hazards:</u>	Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx).

SECTION 6: ACCIDENTAL RELEASE MEASURES

<u>Personal Protection:</u>	Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Keep unprotected persons away.
<u>Environmental Protection:</u>	Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

SECTION 7: HANDLING and STORAGE

<u>Handling:</u>	Avoid breathing dust, vapor, mist or gas. Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away. No smoking. Take measures to prevent the build up of electrostatic charge.
<u>Storage:</u>	Store in a tightly closed container in a dry, well-ventilated place. Store under inert gas.
<u>Storage Temperature:</u>	15 - 30°C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Eyes:</u>	Wear appropriate protective eyeglass or chemical safety goggles. Eyewash facility in vicinity.												
<u>Skin:</u>	Wear impervious gloves and protective clothing.												
<u>Respiratory:</u>	Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.												
<u>Exposure Limits:</u>	<table><thead><tr><th><u>Country</u></th><th><u>Source</u></th><th><u>Type</u></th><th><u>Value</u></th></tr></thead><tbody><tr><td>USA</td><td>ACGIH</td><td>TWA</td><td>Not Available</td></tr><tr><td>USA</td><td>OSHA</td><td>PEL</td><td>Not Available</td></tr></tbody></table>	<u>Country</u>	<u>Source</u>	<u>Type</u>	<u>Value</u>	USA	ACGIH	TWA	Not Available	USA	OSHA	PEL	Not Available
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SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

<u>Appearance:</u>	Liquid
<u>Odor:</u>	Stench
<u>Melting Point:</u>	14-16 °C
<u>Boiling Point:</u>	178-180 °C
<u>Density:</u>	0.873 g/cm ³
<u>Refractive Index, n²⁰_D:</u>	1.458
<u>Viscosity:</u>	Not Available
<u>Solubility in Water:</u>	Not Available

SECTION 10: STABILITY and REACTIVITY

<u>Stability:</u>	Stable under normal temperatures and pressures.
<u>Incompatibility:</u>	Acid chlorides, Acid anhydrides, acids, Strong oxidizing agents, Carbon dioxide (CO ₂).

SECTION 11: TOXICOLOGICAL INFORMATION

RTECS Reference: SA0200000
Target Organs: Not Available
Toxicity Data: Not Available

SECTION 12: ECOLOGICAL INFORMATION

Not Available

SECTION 13: DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Polyamines, liquid, corrosive, N.O.S.
DOT UN Number: UN2735
DOT Hazard Class: 8
DOT Packing Group: III

IATA Shipping Name: Polyamines, liquid, corrosive, N.O.S.
IATA UN Number: UN2735
IATA Hazard Class: 8
IATA Packing Group: III

SECTION 15: REGULATORY INFORMATION

United States:

Toxic Substance Control Act (TSCA): Not listed
Superfund Amendments and Reauthorization Act (SARA 302): Not listed
Superfund Amendments and Reauthorization Act (SARA 313): Not listed

European Union:

European Inventory of Existing Chemical Substances (EINECS): NO. 207-329-0
Hazard Codes: C
Risk Statements: 34
Safety Statements: 26-36/37/39-45

Canada

Canadian Domestic Substances List (DSL): Not listed
Canadian Domestic Substances List (NDSL): Not listed