



# American International Chemical, Inc.

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## MATERIAL SAFETY DATA SHEET

### POLYLYSINE

#### SECTION 1 - CHEMICAL PRODUCT AND COMPANY INFORMATION

American International Chemical, Inc. 135 Newbury Street Framingham, MA 01701	Emergency Number: Chemtrec Information Number:	800-424-9300 703-527-3887 800-238-0001
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Date: September 2009

Synonyms:  $\epsilon$ -Poly-L-lysine

CAS #: 28211-04-3

DOT Hazard Class: Not Regulated

#### SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

90% min. Polylysine  
10% max. Water

#### SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: A hydroscopic, light yellow powder that presents little or no health hazard and no unusual hazard if involved in a fire.

POTENTIAL HEALTH EFFECTS:

**Skin:** May cause skin irritation.

**Eyes:** May cause irritation or burning.

**Inhalation:** May cause irritation to the respiratory tract.

**Ingestion:** Not a hazard with normal industrial usage.

#### SECTION 4 - FIRST AID MEASURES

**Skin:** Immediately wash skin with soap and water for at least 15 minutes.

**Eyes:** Immediately flush with plenty of water for at least 15 minutes, holding eye lids apart.

**Inhalation:** Remove to the fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**Ingestion:** Wash out mouth with water.

**On All Of The Above:** Consult a physician if symptoms persist.

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## **SECTION 5 - FIRE FIGHTING MEASURES**

Flash Point: Non Combustible

Flammable Limits: Non Combustible

Extinguishing Media: Use media that is appropriate to treat surrounding fire.

Special Fire Fighting Procedures:

Use fire fighting procedure that is appropriate to treat surrounding fire. All firefighters should use self-contained breathing apparatus and full fire-fighting turn-out gear.

Unusual Fire Explosion Hazard: During a fire, irritating and highly toxic gasses may be generated by thermal decomposition or combustion.

Auto Ignition Temperature: Not Applicable

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## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Isolate hazard area and deny entry to unnecessary or unprotected personnel.

Contain spill, sweep up, collect and place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways.

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## **SECTION 7 - HANDLING AND STORAGE**

Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Avoid breathing dust. Use normal personal hygiene and housekeeping. Store in cool dry area away from other incompatible materials. Product is slightly hygroscopic and should be stored in a dry area to prevent moisture pick up and caking.

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## **SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirators.

VENTILATION REQUIREMENTS: Ventilate as necessary to eliminate dust from the work area and maintain concentrations below the limit.

SKIN AND EYE PROTECTION: Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin and eyes from dust.

WORK, HYGIENIC PRACTICES:

As required to protect skin and eyes from dust, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

EXPOSURE LIMITS: None Established

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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Boiling Point: Not Applicable

Vapor Pressure (MM Hg): Not Applicable

Vapor Density (AIR=1): Not Applicable

Specific Gravity (H<sub>2</sub>O=1): Not Available

Percent Volatile by Volume (%): Not Applicable

Melting Point: 172.8 °C

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Readily soluble in water.

pH: 6-7

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**SECTION 10 - STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: CO, CO<sup>2</sup> and Nitrogen Oxides

KEEP AWAY FROM: Water (material is hygroscopic).

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**SECTION 11 - TOXICOLOGICAL INFORMATION**

ε-Polylysine was found to be non-toxic at high levels in acute animal studies and was not mutagenic in bacterial reversion assays.

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**SECTION 12 - ECOLOGICAL INFORMATION**

Not Available

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**SECTION 13 - DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all federal, state and local regulations.

RCRA WASTE #: Not Listed

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**SECTION 14 - TRANSPORTATION INFORMATION**

D.O.T. SHIPPING NAME: Polylysine

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**SECTION 15 - REGULATORY INFORMATION**

OSHA STATUS: Not listed

TSCA STATUS: Not Listed

CERCLA REPORTABLE REQUIREMENTS: (RQ) None

SARA TITLE III INFORMATION:

Section 302 Extremely Hazardous Substance Not listed

Section 313 Toxic Chemicals: Not listed

Section 311/312 Hazard Category: Not considered a hazard.

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**SECTION 16 - OTHER INFORMATION**

Reason for Issue: New Product

**This information is given without any warranty or representation. It is believed to be correct but does not claim to be all inclusive and shall be used only as a guide. American International Chemical, Inc., shall not be held liable for any damage resulting from handling or contact with the above product. It is offered solely for your consideration, investigation and verification.**