

Material Safety Data Sheet Issue Date: 7/19/2005

Section 1: Chemical Product and Company Identification

Cat#: 23965

Part Name: POLY(VINYLAMINE) HYDROCHLORIDE

Supplier: Polysciences, Inc.

400 Valley Road

Warrington, PA 18976

Telephone #215-343-6484

Section 2: Composition/ Information on Ingredients

| Item # | Name                           | CAS#      | % in product |
|--------|--------------------------------|-----------|--------------|
| 1      | Poly(vinylamine) hydrochloride | 029792492 | 100          |

OSHA (ACGIH) Exposure Limits

| CAS#      | IDHL   | TWA |       | STEL |       | CEILING |       |
|-----------|--------|-----|-------|------|-------|---------|-------|
|           |        | ppm | mg/m3 | ppm  | mg/m3 | ppm     | mg/m3 |
| 029792492 | NE     |     |       |      |       |         |       |
|           | OSHA:  | NE  | NE    | NE   | NE    | NE      | NE    |
|           | ACGIH: | NE  | NE    | NE   | NE    | NE      | NE    |

Section 3: Hazards Identification

Toxicological properties are not known.

Hazard Ratings:

These ratings are Polysciences' Inc. own assesments of the properties of the material using the ANSI/NFPA 704 Standard.

Additional information can be found by consulting in the NFPA published ratings lists (List 325 and List 49).

If no data is listed the information is not

| Health | Flammability | Reactivity |
|--------|--------------|------------|
| 1      | ----- 1      | ----- 0    |

Section 4: First Aid Measures

Flush eyes with flowing water for at least 15 minutes.

If breathing is difficult, contact emergency personnel.

If swallowed, NO NOT INDUCE vomiting. Give 8 oz. of water or milk to drink.

Call a physician or the POISON CONTROL CENTER

immediately. Never give anything by mouth to an unconscious person.

Remove contaminated clothing.

Remove to fresh air.

Separate eyelids with finger tips.

Wash skin with deluge of water for at least 15 minutes.

Section 5: Fire Fighting Measures

Flash point, deg F.: no data Method: no data

UEL: no data LEL: no data Autoignition temperature, deg. F.: no data

Flammability no data Flame Propagation no data

Hazardous Combustion Products: no data

Section 6: Accidental Release Measures

Any information listed below is to be considered in addition to internal guidelines for isolation of spill, containment of spill, removal of ignition sources from immediate area, and collection for disposal of spill by trained, properly protected clean up personnel.

Protect personnel from exposure.

Sweep up solids.

Section 7: Handling and Storage

Store at room temp

#### Section 8: Exposure Controls/ Personal Protection

The use of eye protection in the form of safety glasses with side shields and the use of skin protection for hands in the form of gloves are considered minimum and non-discretionary in work places and laboratories. Any recommended personal protection equipment or environmental equipment is to be considered as additional to safety glasses and gloves. Use process enclosures, local exhaust ventilation, or other engineering controls.

#### Section 9: Physical and Chemical Properties

Formula: (C<sub>2</sub>H<sub>5</sub>N.C<sub>1</sub>H)<sub>x</sub> vapor pressure: no data  
Formula Weight: no data vapor density: no data  
boiling point: no data Specific gravity: 0  
melting point: no data ph: no data  
solubility: no data appearance: pale yellow to brown powder

#### Section 10: Stability and Reactivity

Chemical stable  
Conditions to Avoid: no data  
Incompatibility with other oxidizing agents  
Hazardous Decomposition oxides of carbon  
Hazardous will not occur

#### Section 11: Toxicological Information

Acute no data  
Subchronic data: no data

#### Section 12: Ecological Information

no data

#### Section 13: Disposal Considerations

The following chart lists the status of the chemical and its components in reference to 40 CFR Part 261.33. If the product is listed by code number the substance may be subject to special federal and state disposal regulations. If no codes are listed the material must be disposed in compliance with all Federal, State and Local Regulations.

| CAS#      | Waste Code | Regulated Name |
|-----------|------------|----------------|
| 029792492 | not listed | not listed     |

#### Section 14: Transportation Data

Refer to bill of lading or container label for DOT or other transportation hazard classification, if any.

#### Section 15: Regulatory Information

All components of this product are on the TSCA public inventory.

Prop 65 - Column A identifies those items which are known to the State of California to cause cancer. Column B identified items which are known to the State of California to cause reproductive toxicity.

| CAS#      | Column A | Column B |
|-----------|----------|----------|
| 029792492 | no       | no       |

State Regulatory Information :If a CAS# is listed below this material is subject to the listed state right-to-know requirements.

CAS#

029792492 not listed

SARA Toxic Release Chemicals(as defined in Section 313 of SARA Title III)  
This list identifies the toxic chemicals, including their de minimis concentrations for which reporting is required under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). The list is also referred to as the Toxics Release Inventory (TRI) List.

| CAS#      | Regulated Name | de minimis conc. | %Rep.      | Thres.     |
|-----------|----------------|------------------|------------|------------|
| 029792492 | not listed     | not listed       | not listed | not listed |

SARA Extremely Hazardous Substances and TPQs

This list includes hazardous chemicals as defined in 29 CFR 1910.1200(c); and extremely hazardous substances regulated under Section 302 of SARA Title III with their TPQs (in pounds), as listed in 40 CFR 355, Appendices A and B.

| CAS#      | Regulated Name | TPQ (pounds) | EHS-RQ(pounds) |
|-----------|----------------|--------------|----------------|
| 029792492 | not listed     | not listed   | not listed     |

CERCLA

The hazardous substances, and their reportable quantities (RQs) are listed in the federal regulations at 40 CFR Part 302, Table 302.4. Release of a CERCLA hazardous substance in an amount equal to or greater than its RQ, in any 24-hour period, must be reported to the National Response Center at (800) 424-8802.

| CAS#      | Regulated name | RQ pounds  |
|-----------|----------------|------------|
| 029792492 | Not listed     | Not listed |

Section 16: Other Information

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END OF MSDS