

Material Safety Data Sheet

Revision Date: 1/10/11

NA = Not Applicable NE = Not Established

Section 1. General Information

Product name: **IPANOL LV**
Common name: Polyamines
Chemical family: Polyamines
Synonyms: Amines Liquid Corrosive
Product Use: Injection Resin % Mortar
Manufacturer: **IPA Systems, Inc.**
2745 North Amber Street, Philadelphia, Pa. 19134
Phone: 800-523-3834 • 215-425-6607
Fax: 215-425-6234
E-mail: info@ipasystems.com
Website: www.ipasystems.com

Emergency Phone Number - Chemtrec: 800-424-9300

Section 2. Hazards Identification

Route of Entry: Eyes, Skin, Swallowing, Inhalation
Target Organs: None known
Inhalation: May cause irritation to nose and throat
Skin Contact: May cause irritation and dermatitis
Eye Contact: May cause irritation, sensitization and may lead to eye damage
Ingestion: May cause irritation of the mouth, stomach and sensitization

HMIS II ratings: Health = 3, Fire = 1, Reactivity = 1
HMIS III ratings: Health = 3, Fire = 1, Physical Hazard = 1
NFPA ratings: Health = 3, Fire = 1, Reactivity = 1

None of the remaining components are considered a hazardous material or carcinogen (1919.1200 Hazard Communication (d) 4.)

| | OSHA PEL | ACGIH TLV |
|-------------|----------|-----------|
| Component A | | |
| 25068386 | NE | NA |
| 2461156 | NE | NE |
| Component B | | |
| 694837 | NE | NE |
| 68411905 | NE | NE |
| 140318 | NE | NE |
| 84852153 | NE | NE |
| 90722 | 10mg/m3 | 5mg/m3 |

None of the remaining components are considered a hazardous material or carcinogen (1910.1200 Hazard Communication (d) 4).

Section 3. Composition/Information on Ingredients

Ingredients: Trade Secret Amine Blend containing one or more of the following:

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| <u>Cas #</u> | <u>Chemical Name</u> | <u>%</u> |
|--------------|----------------------------------|----------|
| Component A | | |
| 25068386 | Modified Bisphenol A/Epoxy Resin | >83% |
| 2461156 | Aliphatic Glycidyl Ether | <17% |

This product contains detectable amounts of the following chemical know to the state of California to cause birth defects/cancer or other reproductive harm: Epichlorohydrin.

Component B

Trade secret Amine Blend containing one or more of the following:

| | | |
|----------|--------------------------------------|------|
| 694837 | | >90% |
| 84852153 | | |
| 907272 | 2,4,6 Tri(diethylaminomethyl) phenol | <10% |

Section 4. First Aid Measures

| | |
|---------------|--|
| Inhalation: | If respiratory irritation occurs, go to fresh air, flood work area with fresh air. If irritation continues seek medical attention. |
| Skin Contact: | Remove contaminated clothing and shoes. Wash affected area(s) thoroughly with soap and water. If irritation persists, seek medical attention. SOLVENTS SHOULD NOT BE USED because they carry the irritant into the skin. |
| Eye Contact: | Flush the eyes with plenty of water for at least 15 minutes. If necessary, gently hold eyelids open during the flush. Immediately seek medical attention. |
| Ingestion: | Obtain immediate medical attention. Do not induce vomiting. Should vomiting occur, be sure to keep victim's head below hips to avoid aspiration of vomits into the lungs. |

Section 5. Fire Fighting Measures

| | |
|----------------------------------|---------------------------|
| Flash Point: | >200°F |
| Flash Point Method: | Pensky Martens Closed Cup |
| Burning Rate: | No data available |
| Autoignition Temperature: | No data available |
| LEL: | NA |
| UEL: | NA |

Special Fire Fighting Procedures: None. Avoid breathing smoke. NFPA Class B-C extinguisher (dry chemical or foam) for Class 1C fires. Water spray may be ineffective on fire but can protect fire-fighters and cool closed containers. Use fog nozzles if water is used. Use supplied breathing masks.

Section 6. Accidental Release Measures

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SMALL SPILLS: Absorb with an inert material (sand, vermiculite). Sweep or scoop up and put into disposal containers. Flush area immediately with water (prevent water from entering waterways).

LARGE SPILLS: Dike area far ahead of liquid spill for later disposal. Do not release into sewers or waterways. Absorb with an inert material (sand, vermiculite). Sweep or scoop up into disposal containers. Flush area immediately with water (prevent water from entering waterways)/

REGULATORY REQUIREMENTS: Follow applicable OSHA regulations (29 CFR 1910.120).

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area or until spill clean-up has been completed.

Section 7. Handling and Storage

Handling Precautions: For professional use only. Avoid eye/skin contact. Wash after using and before eating or smoking. Avoid breathing vapors. Use as directed. Avoid uncontrolled mixing with other mixtures (strong acids, bases and oxidizers). Do not use solvent to thin. Respiratory protection is required when ventilation is inadequate. NIOSH/OSHA approved respirators should be provided and worn.

Storage Requirements: Store in cool/dry location. Do not allow material to freeze, as product may be damaged. Store away from sparks and open flames.

Section 8. Exposure Control / Personal Protection

VENTILATION: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred because it prevents containment dispersion into the work area controlling it as its source.

RESPIRATORY PROTECTION: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and if necessary, wear OSHA/NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen.

PROTECTIVE CLOTHING/EQUIPMENT: Wear chemically protective gloves, boots and aprons to prevent prolonged or repeated skin contact. Wear protective goggles and face shield, per OSHA eye and face protection (29 CFR 1910.133).

CONTAMINATED EQUIPMENT: Separate contaminated work clothing from street clothing. Launder before reuse. Remove this material from you work shoes and clean personal protective equipment.

OTHER PRECAUTIONS: Never eat, drink or smoke in work areas.

This material is not listed by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration

Section 9. Physical And Chemical Properties

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| | | |
|--------------------------|--|--|
| Appearance: | Component A (Clear to light amber) | Component B (amber) |
| Physical State: | Liquid | Boiling Point: ND |
| Odor: | Component A (Mild) Component B (Amine odor) | Freezing/Melting Point: ND/NE |
| pH: | ND | Solubility: Insoluble |
| Vapor Pressure: | N/E | Spec Grav. / Density: A=1.12 B=0.96 |
| Vapor Density: | (Air =1) > 1 | |
| VOC: | 0 | |
| Evaporation Rate: | Slower than Butyl Acetate | |
| Viscosity: | Brookfield 500 cps | |
| Percent Volatile: | 0 | |

Section 10. Stability and Reactivity

| | |
|--|------------------------------------|
| Stability: | Stable |
| Conditions to Avoid: | None |
| Materials to Avoid: | Strong oxidizers, acids and bases. |
| Hazardous Decomposition products: | CO, CO2, NOX |
| Hazardous Polymerization: | None |

Section 11. Toxicological Information

No data available

Section 12. Ecological Information

No data available

Section 13. Disposal Considerations

When disposed of properly, this material does not meet RCRA classification or listing for hazardous waste. Never dispose of a liquid to a landfill. Spilled material should be stabilized or solidified prior to disposal. Once stabilized/solidified, the material may be disposed of through normal means. Certain localities and state laws have specific disposal requirements for non-hazardous industrial chemicals. Consult local municipal authorities, landfill personnel, disposal companies for details prior to any disposal activity. Always follow local, state and federal regulations

Section 14. Transport Information

DOT Class: Corrosive (8) #8

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Shipping Name: Amines, Liquid Corrosive, N.O.S. (aminopropyldietanolamine) UN2735, Class 8 Corrosive PG III

Placards required over 1000 lbs.

Section 15. Regulatory Information

This MSDS has been prepared in accordance with Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

HMIS Codes: Health (3), Flammability (1), Reactivity (2), PPE (H)

Canadian Inventory Status: All components included on the Domestic Substances List (DSL)

Section 16. Other Information

The information and recommendations in this document are based on the best information available to us at the time of preparation. We make no other warranty, expressed or implied, as to its correctness or completeness, or as to the results or reliance of this product.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.