

1. Identification of Product & Company

Product Name: Hardener 401

Product type: Hardener Mixture

Manufacturer/Supplier: United Resin Corporation
4359 Normandy Court
Royal Oak, MI 48073

Information Department: urcepoxy@unitedresin.com
www.unitedresin.com

Emergency Information: (248) 549 – 8200 **Medical Emergency Phone:** Health & Safety Information Services 1-866-303-6949
(248) 549 – 9587 fax

2. Hazard Identification

Classification of the mixture: Skin Corrosion/Irritation – Category 2
Eye Damage/ Irritation – Category 2A
Skin Sensitization – Category 1
Acute Toxicity, Oral – Category 4
Specific Target Organ Toxicity (Single Exposure)
(Respiratory tract irritation) – Category 3

Hazard Pictograms:



Signal Word: WARNING

Hazard Statement: H315-Causes skin irritation. H319-Causes serious eye irritation.
H317-May cause an allergic skin reaction. H302- Harmful if swallowed.
H-335-May cause respiratory irritation.

Precautionary Statement:

Prevention: Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves/protective clothing. Wear eye and face protection. Avoid breathing dust, fume, gas, mist, vapors or spray. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace.

Response: **IF SWALLOWED** rinse mouth. Call poison center or doctor if you feel unwell. **IF ON SKIN** wash with plenty of soap and water. If irritation or rash occurs, get medical advice/attention. Take off contaminated clothing & wash before reuse. **IF IN EYES** rinse cautiously with water for several minutes while holding eye lid(s) open. Remove contact lenses, if present and easy to do and continue rinsing. If eye irritation persists get medical advice/attention. **IF INHALATION** occurs, remove person to fresh air and get medical advice/attention if ill or concerned.

Storage: Store locked up.

Disposal: Dispose of contents and/or container in accordance with Federal, State/Provincial and local governmental regulations.

3. Composition/Information on Ingredients

Chemical Name: Polyamine Polymercaptan Blend

CAS No. Description: Trade Secret

Chemical Name: Bis (aminoethyl) Ether

CAS No. Description: 3033-62-3

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First Aid Measures

Inhalation: Move person to fresh air; if you feel unwell, get medical attention.

Skin contact: Immediately wash with soap and plenty of water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation/rash occurs.

Eye contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses if easy to do and continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed: Rinse mouth. Call poison center or doctor if you feel unwell.

Most important symptoms and effects, both acute and delayed: See Section 11.1 Information on toxicological effects.

Indication of any immediate medical attention and special treatment required: Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

Suitable extinguishing agents: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam or alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams or protein foams may function, but will be less effective. Water fog, applied gently may be used as a blanket for fire extinguishment.

Unsuitable extinguishing agents: Do not use direct water stream, may spread fire.

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide, carbon monoxide, or halogenated compounds.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Special protective equipment for fire-fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Environmental precautions: Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

Methods and materials for containment and clean-up: Move containers from spill area. Absorb with an inert dry material until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Place in an appropriate waste disposal container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/ international regulations. For larger spills, dispose of via a licensed waste disposal contractor. Remove residual with soap and hot water. Solvents are not recommended for clean-up unless the recommended exposure guidelines and safe handling practices for the specific solvent are followed.

7. Handling and Storage

Precautions for safe Handling: For industrial/occupational use only. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (e.g. Chlorine, chromic acid etc.)

Storage: For safe storage, store at or below 72°F (22°C). Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store locked up.

For information on product shelf life, please review Technical Data Sheet.

8. Exposure Controls/ Personal Protection**Control Parameters**

Occupational exposure – None

Engineering Controls – Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

Personal Protective equipment (PPE)

Protective gloves: The glove material has to be impermeable and resistant to the product/the substance/the preparation. Due to missing tests no recommendation to the glove material can be given.



Eye protection: Wear safety glasses; chemical goggles (if splashing is possible).



(Safety Glasses or goggles)

Body protection: Protective work clothing and boots.

Respiratory protection: Wear appropriate respirator when ventilation is inadequate.

9. Physical and Chemical Properties**Appearance:**

Physical State: Liquid
Color: Light Yellow
Odor: Slight
Order threshold: Not Available

pH: Not Available

Melting point/Freezing point: Not Available

Boiling point: Not Available

Boiling range: Not Available

Flash point: >200°F

Evaporation rate: Not Available

Flammability (solid, gas): Not Available

Upper/lower flammability or explosive limits: Upper: Not Available Lower: Not Available

Vapor pressure at 72°F: Not Available

Vapor Density (air=1): Not Available

Relative Density at 72°F: 9.42 lbs/gal **Specific Gravity:** 1.13 **Viscosity:** Not Available

Solubility in/miscibility with Water: Slight

Partition coefficient: n-octanol/water: Not Available

Auto-ignition temperature: Not Available

Decomposition temperature: Not Available

Percent Solids: 100% - **Percent Volatiles:** 0%

10. Stability and Reactivity

Chemical Stability: Stable at normal conditions.

Hazardous reactions: Under normal conditions of storage and use, hazardous reactions should not occur.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should be produced.

Dangerous reactions: In normal storage hazardous reaction will not occur, reacts with amines.

Incompatible materials: Keep away from strong oxidizing agents. Avoid contact with Acids, Bases or unintended contact with amines.

Reactivity: Not available.

Conditions to avoid: Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Failure to observe this precaution may result in excessive heat build-up causing exotherm.

11. Toxicological Information

Relevant routes of exposure: Skin, Inhalation, Eyes and Ingestion

Potential Health Effects/Symptoms:

- Inhalation: May cause respiratory tract irritation. Adverse symptoms may include the following: respiratory tract irritation/coughing.
- Skin contact: This product may cause irritation to the skin. May cause an allergic skin reaction. Adverse symptoms may include the following: irritation, redness or rash
- Eye contact: This product may cause serious eye irritation. Adverse symptoms may include the following: pain, irritation, watering or redness.
- Ingestion: Irritating to mouth, throat and stomach. Adverse symptoms: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Short term exposure

Potential immediate effects: Not available

Potential delayed effects: Not available

Long term exposure

Potential immediate effects: Not available

Potential delayed effects: Not available

12. Ecological Information

Aquatic or Other Organisms Toxicity: No further relevant information available.

Information about elimination (Persistence and Degradability): No further relevant information available.

Bioaccumulation: No further relevant information available.

Mobility in soil: No further relevant information available.

Other Adverse Effects: No known significant effects or critical hazards.

13. Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers retain some product residue. Avoid spilled material and/or runoff with contact in soil, waterways, drains and sewers.

14. Transport Information**Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)**

In accordance with DOT and TDG

Not Regulated

Transport by sea

In accordance with IMDG

Not Regulated

Transport by air

In accordance with IATA

Not Regulated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulations.

OSHA Hazard Communication Standard: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Acute Health Hazard

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Pennsylvania Worker and Community Right-To-Know Act:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Under States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Information source and references: No Data