

SAFETY DATA SHEET

Issue Date 30-Nov-2015 Revision Date 30-Nov-2015 Version 1

1. IDENTIFICATION

Product identifier

Product Name RT-2035-B-2.5-R

Other means of identification

Product Code RT203502 Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Insulation foams
Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

HENRY COMPANY
999 N. Sepulveda Blvd. Si

999 N. Sepulveda Blvd., Suite 800 El Segundo, CA 90245-2716

Web Site: www.henry.com www.ca.henry.com

Emergency telephone number

Company Phone Number 800-486-1278

Emergency Telephone CHEMTREC: 800-424-9300 CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Skin corrosion/irritation | Category 2 |
|--|-------------|
| Serious eye damage/eye irritation | Category 2A |
| Skin sensitization | Category 1B |
| Specific target organ toxicity (single exposure) | Category 3 |

Label elements

Emergency Overview

Warning

Hazard statements

Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause respiratory irritation



Appearance viscous Physical state liquid Odor Slight Aromatic

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing should not be allowed out of the workplace Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of soap and water Take off contaminated clothing and wash before reuse If skin irritation or rash occurs: Get medical advice/attention IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful in contact with skin. Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

Unknown acute toxicity

78.2278% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

<u>Mixture</u>

| Chemical Name | CAS No | Weight-% |
|--|-------------|----------|
| Polyol blend * | Proprietary | 40 - 70 |
| 1,1,1,3,3-Pentafluoropropane * | 460-73-1 | 7 - 13 |
| 2-Propanol, 1-chloro-, phosphate (3:1) * | 13674-84-5 | 5 - 10 |
| Brominated flame retardant * | Proprietary | 3 - 7 |
| N,N-Dimethylcyclohexylamine * | 98-94-2 | 1 - 5 |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice In case of accident or unwellness, seek medical advice immediately (show directions for

use or safety data sheet if possible). If symptoms persist, call a physician.

Eye contact Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial

flushing, remove any contact lenses and continue flushing for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician. Wash contaminated clothing

before reuse.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration.

Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If

symptoms persist, call a physician.

Ingestion Call a physician or poison control center immediately. Do not induce vomiting without

medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Remove all sources of ignition. Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin

irritation. May cause allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO2, sand, earth, water spray or regular foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate

ventilation, especially in confined areas. Use personal protective equipment as required.

Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth

or other non-combustible absorbent material. Take up mechanically, placing in appropriate

containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or

clothing. Wash contaminated clothing before reuse. Handle in accordance with good

industrial hygiene and safety practice. Extremely slippery when spilled.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled

containers. Keep away from heat.

Incompatible materials Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure GuidelinesThis product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid Appearance viscous

Appearance viscous Odor Slight Aromatic

Color amber Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

oH 7-10

Melting point / freezing point No information available

Boiling point / boiling range

No information available

Flash point > 120 °C / 248 °F Tag Closed Cup Evaporation rate No information available

Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit: 17.7 Lower flammability limit: 7.1

Vapor pressure No information available

Vapor density >5

Relative density 1.15 - 1.3 Water solubility partially soluble

Solubility in other solvents No information available Partition coefficient No information available **Autoignition temperature** No information available **Decomposition temperature** No information available

Kinematic viscosity > 100 mm2/s @ 40 °C

Dynamic viscosity No information available **Explosive properties** Not an explosive

Not applicable **Oxidizing properties**

Other Information

No information available Softening point Molecular weight No information available No information available **VOC Content (%) Density** No information available **Bulk density** No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Elevated Temperature. Incompatible materials.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Irritating to respiratory system.

Eye contact Severely irritating to eyes.

Skin contact Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with

susceptible persons.

Ingestion May be harmful if swallowed.

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|--------------------|-------------------------|--------------------------|
| 2-Propanol, 1-chloro-, phosphate (3:1) 13674-84-5 | = 1500 mg/kg (Rat) | = 1230 mg/kg (Rabbit) | = 5 mg/L (Rat) 4 h |
| N,N-Dimethylcyclohexylamine 98-94-2 | = 272 mg/kg (Rat) | - | = 1889 mg/m³ (Rat) 2 h |

Information on toxicological effects

Symptoms May cause an allergic skin reaction. May cause skin irritation. May cause redness and

tearing of the eyes. Coughing and/ or wheezing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SensitizationNo information available.Germ cell mutagenicityNo information available.CarcinogenicityNo information available.Reproductive toxicityNo information available.

STOT - single exposure Target Organs. Respiratory system. Eyes. Skin.

STOT - repeated exposure No information available.

Chronic toxicity May cause adverse effects on the bone marrow and blood-forming system. May cause

adverse liver effects.

Target Organ Effects blood, Central nervous system, Eyes, kidney, liver, Respiratory system, Skin, Urinary Tract.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 1,469.00 mg/kg **ATEmix (dermal)** 2,377.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

86.98294 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

| Chemical Name | Partition coefficient |
|--|-----------------------|
| 2-Propanol, 1-chloro-, phosphate (3:1) 13674-84-5 | 2.59 |
| N,N-Dimethylcyclohexylamine 98-94-2 | 2.01 |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDGNot regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--|------------|---------------|--------------|
| N,N-Dimethylcyclohexylamine 98-94-2 | X | - | - |

| Ethylene glycol 107-21-1 | Х | Х | Х |
|----------------------------------|---|---|---|
| N-Vinyl-2-pyrrolidone 88-12-0 | Х | - | - |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 2 Flammability 1 Instability 0 Physical and Chemical

Properties
HMIS Health hazards 2 Flammability 1 Physical hazards 0 Personal protection X

 Issue Date
 30-Nov-2015

 Revision Date
 30-Nov-2015

Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet