

RENEWWRAP ESR SATURANT PART B**Section 1. Product and Company Identification**

Product Name: RenewWrap® ESR Saturant Part B
Supplier: GeoTree Solutions | 1733 Majestic Rd, Suite 101, Lafayette, CO 80026 | +1 855.655.6750
Emergency Phone Number: 800.424.9300 (CHEMTREC)
+1 703.741.5970 (Outside the US)
Product Description: Amine Hardener
Product Use: Concrete Repairs
Chemical Name or Synonym: N/A

Section 2. Hazards Identification**Classification of the substance or mixture**

Acute toxicity / Oral – Category 4
Acute toxicity / Dermal – Category 4
Acute toxicity / Inhalation – Category 4
Skin Corrosion / irritation – Category 1C
Sensitization / skin – Category 1
Eye damage / eye irritation – Category 1
Aquatic Chronic – Category 3

Label Elements:**Hazard Statement(s):**

H302 Harmful if swallowed
H312 Harmful in contact with skin
H332 Harmful if inhaled
H314 Causes severe skin burns and eye damage
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H412 Harmful to aquatic life with long lasting effects

Signal Word: Danger

Precautionary Statement(s):

P264 Wash hands and skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.



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P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

Section 3. Composition/ Information on Ingredients

Chemical Name	CAS-No	Weight %
Isophorone diamine	2855-13-2	25 – 35
Aromatic Urethane Modifier	N/A	25 – 35
Benzyl alcohol	100-51-6	10 – 20
Polyoxypropylenediamine	9046-10-0	5 – 15

Section 4. First Aid Measures**First Aid Measures for Accidental:**

Inhalation: Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). Remove source of exposure or move to fresh air. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor. Immediately call a Poison Centre or doctor.

Skin Contact: Avoid direct contact. Wear chemical protective clothing if necessary. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs get medical advice/attention.

Eye Contact: Avoid direct contact. Wear chemical protective gloves if necessary. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice/attention.

Ingestion: Rinse mouth with water. Never give anything by mouth if victim is rapidly losing consciousness or is unconscious or convulsing. Do not induce vomiting. Get medical advice/attention if you feel unwell or are concerned.

Most important symptoms/effects, acute and delayed:

Inhalation: Dust irritates the respiratory system and may cause coughing and difficulties in breathing.

Eye contact: Dust may be irritating to the eyes and respiratory tract and may cause a low-level inflammatory response in the lungs. Not known to cause permanent injury to eye tissue.

Skin Contact: If on skin: may cause moderate to severe irritation. If in eyes: may cause moderate to severe irritation. May cause sensitization by skin contact.

Ingestion: Ingestion may cause severe irritation of the mouth, the esophagus and the gastrointestinal tract.

Indication of immediate medical attention and special treatment needed: Treat symptomatically.

Target Organs: Lungs, respiratory system, skin.

Section 5. Fire Fighting Measures



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Suitable Extinguishing Media: CO₂, extinguishing powder or water spray. Fight larger fire with water spray. Use firefighting measures that suit the environment. Use water to keep non-leaking, fire-exposed containers cool.

Unsuitable Extinguishing Media: No data available

Special Fire Fighting Procedures: Wear complete firefighting gear and self-contained breathing apparatus to protect against potential harmful and/or irritating fumes. Use water to keep fire exposed containers cool. Do not use high volume water jet on the fire as this may spread the area of the fire.

Special Protective Equipment for Fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Specific Hazards Arising from the substance or mixture: Heating increases the release of toxic vapors. In a fire, the following hazardous materials may be generated: carbon monoxide, carbon dioxide, corrosive oxidizing nitrogen oxides.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures: Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

Environmental Precautions: Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up: Small spills or leaks: stop or reduce leak if safe to do so. Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. Large spills or leaks: dike spilled product to prevent runoff. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

Section 7. Handling and Storage

Precautions for safe handling: Do not breathe in this product. Prevent all skin contact. Do not get in eyes. Only use where there is adequate ventilation. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system). If product is transferred to another container, ensure new container is suitable for the product. Wear personal protective equipment to avoid direct contact with this chemical. Do NOT eat, drink or store food in work areas. Remove contaminated clothing and protective equipment before entering eating areas or leaving work area. Wash hands thoroughly after handling this material.

Conditions for safe storage including any incompatibilities: Store in an area that is: ventilated. Store in corrosive resistant container with a resistant inner liner. Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet. Comply with all applicable health and safety regulations, fire and building codes.



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Section 8. Exposure Controls / Personal Protection**Control Parameters (Exposure Limits):**

Benzyl Alcohol: AIHA WEEL 8-hr TWA - 10ppm

Appropriate Engineering Control: In a confined space: general ventilation is usually adequate. For large scale use of this product: do not allow product to accumulate in the air in work or storage areas, or in confined spaces. Provide eyewash and safety shower if contact or splash hazard exists.

Personal Protective Equipment:

Respiratory Protection: Wear a NIOSH approved air-purifying respirator with an organic vapor cartridge

Eye / Face Protection: Wear necessary protective equipment. Avoid contact with eyes and prolonged skin contact. Wear chemical safety goggles

Skin Protection: Wear suitable protective clothing as protection against splashing or contamination. Wash promptly with soap and water if skin becomes contaminated. Protective gloves should be used if there is a risk of direct contact or splash. Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves. Wear rubber boots. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Additional protective measures: None

Section 9. Physical and Chemical Properties

Physical State:	Liquid
Colour:	Colourless
Odor:	Ammonia-like
Melting Point/ Freezing Point:	No data available
Boiling point:	No data available
Flammability (solid, gas):	No data available
Lower and Upper Explosion limits/	
Flammability Limits:	No data available
Flash Point:	117°C (242°F)
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
pH:	No data available
Kinematic Viscosity:	No data available
Solubility:	No data available
Evaporation rate (ether=1):	No data available
Flammability Limits in Air:	No data available
Solubility in other solvents:	No data available
Partition coefficient (n-octanol/water):	No data available
Vapour Pressure:	No data available



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Relative Density: 0.92
Relative Vapour Density: No data available
Specific Gravity: No data available
Particle Characteristics: No data available

Section 10. Stability and Reactivity

Reactivity: Not reactive under normal conditions of use

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous reactions: None expected under normal conditions of storage and use.

Conditions to Avoid: Open flames, sparks, static discharge, heat and other ignition sources.

Incompatible Materials / Chemicals: Strong Acids, strong oxidizing agents

Hazardous Decomposition Products: Ammonia

Section 11. Toxicological Information

Information in the likely route of exposure:

Potential Acute Health Effects:

Skin contact: Irritating to skin.

Eye contact: Irritating to eyes.

Inhalation/Ingestion: In a confined space: general ventilation is usually adequate. For large scale use of this product: do not allow product to accumulate in the air in work or storage areas, or in confined spaces.

Acute Toxicity:

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Isophorone diamine	-	1,030 mg/kg (rat)	-
Benzyl alcohol	8.9 mg/L (rat) 4-hr exposure	1,610 mg/kg (rat)	2,000 mg/kg (rabbit)
Polyoxypropylenediamine	-	2,885 mg/kg (rat)	2,980 mg/m3 (rat)

Symptoms related to the physical, chemical and toxicological characteristics:

Target organs: No data available

Mutagenicity: No data available

Carcinogenicity: Not known to cause cancer

Reproductive Toxicity: Not known to harm the unborn child, cause effects on sexual function or fertility or cause effects on or via lactation.

Tetratogenicity: No data available

Specific Target Organ Toxicity - single exposure (STOT-se): Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest (Inhalation), Corrosive to skin. Causes burns. May cause sensitization by skin contact (Skin Absorption) Can cause lung damage if aspirated based on human experience. (Aspiration)

Specific Target Organ Toxicity - repeated exposure (STOT-re): Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels

Over-exposure signs / symptoms: No data available

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

Short term exposure: No data available.

Long term exposure: No data available



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Respiratory and/or Skin Sensitization: Respiratory sensitizer. Skin sensitizer. In sensitized people, exposure to a very small amount of product can cause symptoms including wheezing, difficult breathing, sneezing and runny or blocked nose. Can cause death. Symptoms can develop immediately following exposure or hours later. Repeated exposure will make the reaction worse.

Numerical measures of toxicity: No data available

Section 12. Ecological Information**Toxicity:****Acute Aquatic Toxicity:**

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Algae
Isophorone diamine	110 mg/L (96-hr semi static)	23 mg/L (Daphnia magna 48 hr; static)	37 mg/L 72hr static
Benzyl alcohol	460 mg/L Pimephales promelas (96-hr)	360 mg/L (Daphnia magna 48 hr; static)	
Polyoxypropylenediamine	>200 mg/L (96-hr)	2885 mg/kg (rat)	

Ecotoxicity: No determined

Persistence and degradability: Not rapidly degradation based on quantitate test.

Bioaccumulative potential: This product and its degradation products not expected to bioaccumulate based on the n-octanol/water partition coefficient (Log Kow).

Mobility in soil: No determined

Other adverse effects: No determined

Section 13. Disposal Considerations

Waste treatment methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Uncleaned packaging: Do not re-use empty containers for food, clothing, or products for human or animal consumption, or where skin contact can occur. Dispose of container and unused contents in accordance with federal, state, and local regulations.

Section 14. Transport Information**US DOT:**

Proper Shipping Name: Corrosive Liquid, N.O.S. (Alkyl Polyamine)

UN number: UN1760

Hazard Class: 8

Packing Group: PG III

Canadian TDG:

Proper Shipping Name: Corrosive Liquid, N.O.S. (Alkyl Polyamine)

UN number: UN1760

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Hazard Class: 8
Packing Group: PG III

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Canada**WHMIS Classification**

D2B – Toxic (Skin irritant; Eye irritant; Skin sensitization)
E- Corrosive

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL): All ingredients are listed on the DSL or are not required to be listed.

USA

Toxic Substances Control Act (TSCA) Section 8(b): All ingredients are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.

Section 16. Other Information**NFPA Rating**

Health - 3 Flammability - 1 Instability – 0

Key Legend Information:

CAS – Chemical Abstracts Service

OSHA – Occupational Safety and Health Administration

NIOSH – National Institute for Occupational Safety and Health

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