

## MATERIAL SAFETY DATA SHEET

COMPLIES WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200

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### SECTION 1

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TRADE NAME :	<b>ECOGUARD CRACK REPAIR</b>	<b>NPCA HMIS RATING :</b>
	<b>COMPONENT "A" RESIN</b>	Health: 2
PRODUCT CLASS:	Polyurethane Resin for Concrete Repair	Flammability: 0
		Reactivity: 0
PRODUCT APPEARANCE	White-yellowish liquid resin with faint odor	Personal Protection : E

### SECTION 2 INGREDIENTS

#### OCCUPATIONAL EXPOSURE LIMITS

INGREDIENT	CAS#	%	ACGIH TLV (TWA)	ACGIH TLV (STEL)	OSHA PEL (TWA)	OSHA PEL (STEL)	VAPOR PRESSURE
Polyether polyol <b>mixture</b>	Proprietary- Not Listed	100	N.E.	N.E.	N.E.	N.E.	N.A.

### SECTION 3 EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT:	Flush eyes with large amounts of water until irritation subsides .Keep eyelids apart. Wash within 1 minute of contact for maximum results. Obtain medical attention.
SKIN CONTACT:	Remove contaminated clothing/shoes. Wipe excess from skin and wash skin with soap and water. Do not reuse clothing until it is cleaned.
INHALATION:	Remove victim to fresh air and provide oxygen if breathing is difficult. Administer artificial respiration if breathing has stopped. Seek medical attention.
INGESTION:	Do not give liquids if victim is unconscious or very drowsy. Otherwise, give no more than 2 glasses of water and induce vomiting by giving 30cc (2 Tablespoons) Syrup of Ipecac. If Ipecac is unavailable, give 2 glasses of water and induce vomiting by touching finger to back of victim's throat. Keep victim's head below hips while vomiting. Get medical attention. If victim is a child, give no more than 1 glass of water and 15cc (1 Tablespoon) of Syrup of Ipecac. If symptoms such as loss of gag reflex, convulsions, or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

### SECTION 4 PHYSICAL DATA

The following data represents approximate or typical values. They do not constitute product specifications

VISCOSITY	250 mPas	VAPOR DENSITY(AIR=1):	Heavier than air
EVAPORATION RATE:	N.A.	WEIGHT PER GALLON	8.57 lb./gallon
MELTING POINT	N.A.	VAPOR PRESSURE (mm Hg)	< 1
SOLUBILITY IN WATER:	Partially	SPECIFIC GRAVITY @ 70 F (21 C)	1.03 g/cc

## SECTION 5 FIRE AND EXPLOSION DATA

FLASH POINT:	Approx. 175 deg C, (ASTM D93 PMCC method)
LOWER EXPLOSIVE LIMIT:	0.4 Vol. %
UPPER EXPLOSIVE LIMIT:	4.7 Vol.%
IGNITION TEMPERATURE:	>450 deg. C
EXTINGUISHING MEDIA:	Use Water Fog, Alcohol Foam, Dry Chemical, or CO2.
UNUSUAL FIRE & EXPLOSION HAZARDS:	No unusual hazards.
SPECIAL FIRE FIGHTING PROCEDURES:	Material will not burn unless preheated. Do not enter confined space without full bunker gear, including face shield, coat, gloves, rubber boots, and a positive pressure NIOSH approved self-contained breathing apparatus. Remove all ignition sources. Cool exposed containers with water.

## SECTION 6 HEALTH HAZARD DATA

<b>EFFECTS OF OVEREXPOSURE</b>	
EYE CONTACT:	Liquid is moderately irritating to the eyes. May cause slight transient (temporary) eye irritation. Corneal injury is unlikely.
SKIN CONTACT:	Compound is slightly irritating to the skin with repeated exposure. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts.
INHALATION:	High vapor concentrations may be irritating to the nose, throat, and respiratory tract and may cause central nervous system depression.
INGESTION:	Ingestion of product may result in vomiting; aspiration (breathing) of vomits into the lungs must be avoided as even small quantities may result in aspiration pneumonitis. Considered moderately toxic and may be harmful if swallowed.
TERATOLOGY (BIRTH DEFECTS)	Birth defects are unlikely. Even exposures having an adverse effect on the mother should have no effect on the fetus.
CARCINOGENICITY:	This product does not contain 0.1% or more of any substance which is listed as a carcinogen by NTP, IARC, OR OSHA.
REPRODUCTIVE EFFECTS:	In animal studies, has been shown not to interfere with reproduction.
SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:	No data available

## SECTION 7 REACTIVITY DATA

STABILITY:	Stable
CONDITIONS TO AVOID:	Keep containers tightly closed and dry. Avoid heat, sparks, flames, and warm storage. Excess heating above 60C over long periods of time degrades the resin.
INCOMPATIBILITY (MATERIALS TO AVOID):	Not known
HAZARDOUS DECOMPOSITION PRODUCTS:	Not known
HAZARDOUS POLYMERIZATION:	Not known

## SECTION 8 SPILL OR LEAK PROCEDURES

<b>STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:</b>	Ventilate area. Absorb spill with suitable absorbent material and place into a closed container. Prevent material from entering waterways. Wear protective equipment during clean-up. Use eye and skin protection. Protect the environment. Keep out of sewers, storm drains, surface water and soil. Keep spark producing equipment away.
<b>WASTE DISPOSAL METHOD:</b>	Any disposal practice must be in compliance with all federal, state, provincial and local laws and regulations. State / provincial and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Waste characterization and disposal compliance are the responsibility solely of the party generating the waste or deciding to discard or dispose of the material. The preferred waste management option for unused, uncontaminated, unaltered material is to send to a properly licensed or permitted recycler, reclaimer, or incinerator.

### SECTION 9 SAFE HANDLING AND USE INFORMATION:

RESPIRATORY PROTECTION:	Appropriate organic vapor type canister, self contained breathing apparatus or supplied air hose mask, if TLV is exceeded. Use a NIOSH-approved respirator as required to prevent over exposure. In accord with 20 CFR 1910.134, use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.
VENTILATION:	Sufficient, in volume and pattern, to keep workroom concentration below current applicable OSHA safety and health requirements. See section 2. Use explosion-proof equipment. No smoking.
PROTECTIVE GLOVES:	Impervious gloves. Apply barrier cream before exposure. Do not apply cream after exposure.
EYE PROTECTION:	Chemical safety goggles.
OTHER PROTECTIVE EQUIPMENT:	As required to prevent wetting of the skin or clothing.

### SECTION 10 SPECIAL PRECAUTIONS

HYGIENIC PRACTICES:	Keep containers closed when not in use. Avoid eye contact. Avoid prolonged or repeated contact with skin. Wash skin with soap and water after contact. Solvents should not be used to clean skin because of increased penetration potential. This material may cause sensitization. Avoid prolonged exposure to light. Store at temperatures below 120 F.
EMPTY CONTAINER WARNING:	“Empty” containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, spark or other sources of ignition. They may explode and cause injury or death. Do not attempt to clean since residue is difficult to remove. “Empty” drums should be completely drained, properly bunged and promptly returned to supplier or disposed of in an environmentally safe manner and in accordance with governmental regulations.

### SECTION 11 TOXICOLOGICAL INFORMATION

SKIN: The LD50 for skin absorption in rabbits is 2,000 mg/kg -estimated
INGESTION: The oral LD50 for rats is > near saturated vapor concentration (4h)
PRIMARY IRRITATION: On the skin= Slightly irritating, On the eye = Slightly irritating, After inhalation= No data available.
SENSITIZATION: No data available. Effects were not observed in animal studies
ADDITIONAL TOXICOLOGICAL INFORMATION: As with the use of all chemicals to date, toxicological properties with repeated exposure cannot be excluded.
GERM CELL MUTAGENICITY: The substance was not mutagenic in bacteria.
CARCINOGENICITY: No data available

### SECTION 12 ENVIRONMENTAL DATA

ECOTOXICITY: Easily biodegradable
ACUTE FISH TOXICITY: LC 50 > 200 mg -estimated
ACUTE TOXICITY TO BACTERIA: EC 50 > 100 mg -estimated
ACUTE TOXICITY TO DAPHNIA: EC 50 > 100 mg -estimated

AQUATIC PLANTS: EC 50(72 h) . 100 mg/L Scenedesmus subspicatus (OECD Guideline 201) Nominal Concentration. Microorganisms/Effect on activated sludge: EC 20 (0.5 h) >100 mg/l, activated sludge, domestic (DIN EN ISO 8192-OECD 209-88/302/EWG,TC) During correct introduction of low concentrations in biological wastewater treatment of the degradation activity of activated sludge is not expected.
PERSISTENCE AND DEGRADABILITY: Assessment biodegradation and elimination (H20): The product can by abiotic processes, zBAbsorption on activated sludge, are largely eliminated from the water.
INFORMATION ON ELIMINATION: >70% DOC reduction (OECD 302B, ISO 9888, 88/302/EEC, part C) eliminated from the water well.
BIOACCUMULATION POTENTIAL: The polymer component is not due to its structural properties bioavailable. Concentration in organisms is not expected.
OTHER ECOTOXICOLOGICAL INFORMATION: Do not release into natural waters. Negative environmental effects are based on current knowledge is not expected. The information available is determined by analogy.

### SECTION 13 TRANSPORT INFORMATION

LAND TRANSPORT ADR/RID / UN RATING	Not Applicable
D.O.T HAZARD CLASSIFICATION	Marine Pollutant, UN 3082, PG III, HC 9
PROPER SHIPPING NAME:	Environmentally Hazardous Substance. Liquid, NOS (hydrocarbon alkylated aromatic)
AIR TRANSPORT ICAO-TI and IATA-DGR UN:	Not Applicable

### SECTION 14 REGULATORY INFORMATION

SARA 313 INFORMATION:	This product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.
SARA HAZARD CATEGORY:	This resin has been reviewed according to the EPA "Hazard Categories" under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III ) and is considered, under applicable definitions, to meet the following categories: <b>None</b>
TOXIC SUBSTANCES CONTROL ACT (TSCA):	All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.
OSHA HAZARD COMMUNICATION STANDARD:	Not Available
CANADIAN REGULATIONS:	WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is: <b>None</b>
CPR STATEMENT:	This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.
HAZARDOUS PRODUCTS ACT INFORMATION:	<b>None</b>

\* Note: This material safety data sheet attempts to describe as accurately as possible the potential exposures associated with normal product use. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. The information and recommendations contained herein are based upon data believed to be correct. Concrete Earth makes no warranties, expressed or implied, and assume no liability in connection with any use of this information. Refer to 49 CFR for possible exceptions and exemptions. Abbreviations: TLV = Threshold Limit Value. TWA = Time Weighted Average. STEL = Short Term Exposure Limit. N.A. = Not Applicable. All statements, information, and data provided in this material data safety sheet are believed to be accurate and reliable, but are presented without any guarantee. Users should make their own investigations to determine the suitability of the information or products for their particular purposes