

MVB Resin - Part A

SECTION 1. IDENTIFICATION

Product Identifier	MVB Resin - Part A
Other Means of Identification	N/A
Product Family	Epoxy Resins
Recommended Use	Industrial concrete coating.
Restrictions on Use	This product is designed as part of a system in 2 parts and must be mixed, according to manufacturer's instructions, with the appropriate partner product before use.
Manufacturer	R&D Technical Solutions Ltd., 7000 Davand Drive, Mississauga, ON, L5T 1J5, 905-795-9900, www.rdsolutions.ca
Emergency Phone No.	CANUTEC, 1-613-996-6666, 24 HR
Date of Preparation	August 03, 2018

SECTION 2. HAZARD IDENTIFICATION

Classification

Skin irritation - Category 2; Serious eye damage - Category 1; Skin sensitization - Category 1

Label Elements



Signal Word:

Danger

Hazard Statement(s):

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

Precautionary Statement(s):

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear eye protection/face protection.

P280 Wear protective gloves.

P264 Wash hands and skin thoroughly after handling.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

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

P310 Immediately call a POISON CENTRE or doctor.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers	25085-99-8	65.0-85.0		
Oxirane, mono((C12-14-alkyloxy)methyl) derivatives	0068609-97-2	7.0-13.0		
Neopentyl glycol diglycidal ether	0017557-23-2	7.0-13.0		
Cashew, nutshell liq.	8007-24-7	7.0-13.0		

Notes

Any concentration shown as a range is to protect confidentiality or due to batch variations.

SECTION 4. FIRST-AID MEASURES

First-aid Measures

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. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse with lukewarm, gently flowing water for 5 minutes. If skin irritation or a rash occurs, get medical advice or attention. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely.

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. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Do not induce vomiting. Immediately call a Poison Centre or doctor.

Most Important Symptoms and Effects, Acute and Delayed

Repeated or prolonged exposure can irritate the skin. May cause serious eye damage. May irritate or burn the eyes. Permanent damage including blindness may result. Skin sensitizer. May cause an allergic skin reaction in some people.

Immediate Medical Attention and Special Treatment

Target Organs

This product is unlikely to target specific organs. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Special Instructions

Not applicable.

Medical Conditions Aggravated by Exposure

Dermatitis, skin allergies.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire. Smothering the fire with large quantities of dirt or sand is usually the best option for extinguishing fires, if safe to do so.

Unsuitable Extinguishing Media

Do not use direct water stream - may cause fire to spread. Use of water may result in highly contaminated run-off that will require containment.

Specific Hazards Arising from the Product

During a fire, smoke may contain the original material in addition to combustion products which may be toxic and/or irritating. Contain fire water runoff if possible - may cause environmental damage.

Not known to generate any hazardous decomposition products in a fire.

Special Protective Equipment and Precautions for Fire-fighters

No special precautions are necessary.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

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. Use the personal protective equipment recommended in Section 8 of this safety data sheet.

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. Minimize the use of water to prevent environmental contamination.

Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Suitable absorbents are: clay, dirt, sand, Milsorb® place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product.

Other Information

Report spills to local health, safety and environmental authorities, as required.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not breathe in this product. Do not get in eyes, on skin or on clothing. Avoid generating vapours or mists. Prevent uncontrolled release of product. Avoid release to the environment. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system). Avoid heating that will increase the amount of vapours. Avoid repeated or prolonged skin contact with product or with contaminated equipment/surfaces. General hygiene considerations: do NOT eat, drink or store food in work areas. Wash hands thoroughly after handling this material. Immediately remove contaminated clothing using the method that minimizes exposure.

Conditions for Safe Storage

Store in an area that is: ventilated, separate from incompatible materials (see Section 10: Stability and Reactivity).

Store in the original, labelled, shipping container. Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Not available.

This product has not been tested. Consult local authorities for provincial or state exposure limits.

Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Workers must use appropriate certified respirators when facing concentrations above the exposure limits.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots. Chemical-resistant, impervious gloves which comply with an approved standard should be worn at all times when handling.

Neoprene rubber, butyl rubber, Viton®.

Respiratory Protection

Not normally required if product is used as directed. In case of inadequate ventilation wear respiratory protection.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Yellowish viscous liquid.
Odour	faint
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	Not available
Flash Point	> 93 °C (199 °F) (closed cup)
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable (liquid).
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.095
Solubility	Practically insoluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Liquid
VOC	<5 g/l -water

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use. Can undergo vigorous decomposition at temperatures above 350C.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Polymerizes in the presence of aliphatic amines.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources. Prolonged exposure to high temperatures. Temperatures above 300.0 °C (572.0 °F)

Incompatible Materials

Avoid contact with: oxidizing agents (e.g. peroxides), strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide). Avoid unintended contact with amines.

Hazardous Decomposition Products

Can include, but not limited to: very toxic carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

No data for the product itself.

Likely Routes of Exposure

Skin contact; eye contact; ingestion; skin absorption.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers	Not applicable	> 15,000 mg/kg (rat)	23,000 mg/kg (rabbit)
Oxirane, mono((C12-14-alkyloxy)methyl) derivatives	Not available	>= 17100 mg/kg (rat)	> 4.5 mL/kg (rabbit)
Neopentyl glycol diglycidal ether		4500 mg/kg (rat)	> 2100 mg/kg (rat)
Cashew, nutshell liq.		> 2000 mg/kg (rat)	2000 mg/kg

Based on available data, the classification criteria are not met.

Oral ATEMix = 16289.59 mg/kg

Dermal ATEMix = 7200.22 mg/kg

Skin Corrosion/Irritation

There is limited evidence of moderate or severe irritation. Symptoms include pain, redness, and swelling. (Cashew, nutshell liq.) may burn the skin. Permanent scarring may result.

Serious Eye Damage/Irritation

There is limited evidence of serious eye irritation. May cause serious eye damage based on information for closely related materials. (Cashew, nutshell liq.)

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Exposure to vapour is minimal due to low volatility at room temperature. Exposure to heated vapours may cause irritation to the nose, throat or mucous membranes.

Skin Absorption

May be harmful based on limited evidence.

Ingestion

May cause irritation of the mouth, throat and stomach.

Aspiration Hazard

Not known to be an aspiration hazard.

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STOT (Specific Target Organ Toxicity) - Repeated Exposure

Repeated and/or prolonged contact may cause dermatitis.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. May cause an allergic reaction (skin sensitization) based on limited evidence. In sensitized people, contact with a very small amount of product can cause an allergic reaction. Symptoms include redness, rash, itching and swelling. This reaction can spread from the hands or arms to the face and body. Repeated exposure will make the reaction worse.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers	Group 3	Not Listed	Not Listed	
Oxirane, mono((C12-14-alkyloxy)methyl) derivatives	Not Listed	Not Listed	Not Listed	Not Listed
Cashew, nutshell liq.	Not Listed		Not Listed	Not Listed

Not known to cause cancer.

Key to Abbreviations

IARC = International Agency for Research on Cancer. Group 3 = Not classifiable as to its carcinogenicity to humans.

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

Not known to cause effects on sexual function or fertility.

Effects on or via Lactation

Not known to cause effects on or via lactation.

Germ Cell Mutagenicity

Not known to be a mutagen.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

May be harmful to aquatic life.

Persistence and Degradability

Does not degrade rapidly based on quantitative tests. (Propane, 2,2-bis[p-(2,3-epoxypropoxy)phenyl]-, polymers)

Bioaccumulative Potential

The product has potential for bioaccumulation.

Mobility in Soil

If released into the environment, this product is not expected to move through the soil, based on physical and chemical properties.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Product Identifier: MVB Resin - Part A - Ver. 1
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Dispose of contents and container in accordance with local, regional, national and international regulations. The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user. Empty containers retain product residue. Follow label warnings even if container appears to be empty.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
IMO (Marine)	UN3082	Environmentally Hazardous Substance, Liquid N.O.S. (Epoxy Resin)	Class 8	III

Special Precautions Please note: ROAD/RAIL: Not regulated in packages 450 litres or less.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

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

SDS Prepared By	Compliance & Documentation Coordinator
Phone No.	905-795-9900
Date of Preparation	August 03, 2018
Date of Last Revision	March 14, 2019
Revision Indicators	Not applicable. The following SDS content was changed on March 14, 2019: SECTION 11. TOXICOLOGICAL INFORMATION; LC50/LD50 values. The following SDS content was changed on March 14, 2019: SECTION 11. TOXICOLOGICAL INFORMATION; LC50/LD50 values.
Key to Abbreviations	IARC = International Agency for Research on Cancer ACGIH® = American Conference of Governmental Industrial Hygienists NIOSH = National Institute for Occupational Safety and Health NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Accelrys, Inc. Available from Canadian Centre for Occupational Health and Safety (CCOHS).
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