

Crack Filler Resin - Part A

SECTION 1. IDENTIFICATION

Product Identifier	Crack Filler Resin - Part A
Other Means of Identification	N/A
Product Family	Epoxy Resins
Recommended Use	Used to fill cracks and non-moving construction joints.
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/Supplier Identifier	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

SECTION 2. HAZARD IDENTIFICATION

Classification

Flammable liquid - Category 3; Skin irritation - Category 2; Serious eye damage - Category 1; Skin sensitization - Category 1A; Germ cell mutagenicity - Category 2; Specific target organ toxicity (single exposure) - Category 3; Specific target organ toxicity (repeated exposure) - Category 2; Aquatic hazard (Acute) - Category 3; Aquatic hazard (Chronic) - Category 4

Label Elements



Warning

Hazard Statement(s):

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H341	Suspected of causing genetic defects.
H402	Harmful to aquatic life.
H413	May cause long lasting harmful effects to aquatic life.

Precautionary Statement(s):

P210	Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust, fume, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/eye protection/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of water.
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.
P312 Call a POISON CENTRE or doctor if you feel unwell.
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.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
Disposal:
P501 Dispose of contents and container in accordance with local, regional, national and international regulations.
Other Hazards
Not applicable.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Diglycidyl ether of bisphenol A-based epoxy resins, low molecular weight solids	25068-38-6	75-90	
Benzyl alcohol	100-51-6	5-10	
Urea, polymer with formaldehyde, butylated	68002-19-7	0-1.5	

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

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 contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Call a Poison Centre or doctor if you feel unwell. If skin irritation or a rash occurs, get medical advice or attention.

Eye Contact

If a contact lens is present, DO NOT delay flushing or attempt to remove the lens. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present, after the initial 1-2 minutes and continue flushing for several additional minutes. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water. Get medical advice or attention if you feel unwell or are concerned.

First-aid Comments

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

Most Important Symptoms and Effects, Acute and Delayed

If on skin: may cause moderate to severe irritation. Repeated or prolonged exposure can irritate the skin. Symptoms include pain, redness, and swelling. May cause serious eye damage. May irritate or burn the eyes. Permanent damage including blindness may result.

Immediate Medical Attention and Special Treatment

Target Organs

Skin.

Special Instructions

Not applicable.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog. Use water to keep non-leaking, fire-exposed containers cool.

Unsuitable Extinguishing Media

Do not use direct water stream - may cause fire to spread.

Specific Hazards Arising from the Product

See Section 9 (Physical and Chemical Properties) for flash point and explosive limits. Closed containers may rupture violently when heated releasing contents.

Very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Evacuate area. Fight fire from a safe distance or a protected location. Dike and recover contaminated water for appropriate disposal.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn. Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary. See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

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

Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up. Contain and soak up spill with absorbent that does not react with spilled product. Do NOT use combustible materials such as sawdust. Place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product. Large spills or leaks: dike spilled product to prevent runoff.

Other Information

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

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid breathing in this product. Avoid repeated or prolonged skin contact. Prevent skin contact. Do not get in eyes, on skin or on clothing. Only use where there is adequate ventilation. Avoid release to the environment. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system). Prevent accidental contact with incompatible chemicals. Wear personal protective equipment to avoid direct contact with this chemical. Do NOT smoke in work areas. Do NOT eat, drink or store food in work areas. Wash hands thoroughly after handling this product and before eating, using the washroom or leaving work area.

Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources. Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity). 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.

Consult local authorities for provincial or state exposure limits. TLV® = Threshold Limit Value. TWA = Time-Weighted Average.

Appropriate Engineering Controls

General ventilation is usually adequate. Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Control static electricity discharges which includes bonding of equipment to ground. Provide eyewash in work area, if contact or splash hazard exists.

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, imperious gloves complying with an approved standard should be worn at all times when handling. Suitable materials are: butyl rubber, neoprene rubber, nitrile rubber, polyvinyl chloride.

Respiratory Protection

Not normally required if product is used as directed. In case of inadequate ventilation wear respiratory protection. For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Clear colourless liquid. Absorbs moisture from the air.
Odour	Aromatic (Benzyl alcohol)
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	> 34 °C (93 °F) (estimated)
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable
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)	1.188
Solubility	Not available 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
Molecular Formula	Not available
Bulk Density	Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use. Extended exposure to high temperatures degrades the resin - hazardous polymerization may occur.

Conditions to Avoid

Prolonged exposure to high temperatures. Incompatible materials.

Incompatible Materials

Oxidizing agents (e.g. peroxides), strong acids (e.g. hydrochloric acid), amines (e.g. triethylamine).

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; corrosive phenols.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact; eye contact; inhalation.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Diglycidyl ether of bisphenol A-based epoxy resins, low molecular weight solids	Not available	> 15,000 mg/kg (rat)	23,000 mg/kg (rabbit)
Benzyl alcohol	> 4.168 mg/L (rat) (4-hour exposure) (vapour)	1230 mg/kg (rat)	2000 mg/kg (rabbit)
Urea, polymer with formaldehyde, butylated	> 10 mg/L (rat) (4-hour exposure) (mist)	1420 mg/kg (rat)	> 7000 mg/kg (rabbit)

LC50: No information was located.

LD50 (oral): No information was located.

LD50 (dermal): No information was located.

Skin Corrosion/Irritation

May cause mild irritation based on information for closely related chemicals.

Serious Eye Damage/Irritation

Human experience and animal tests show serious eye irritation. (Benzyl alcohol)

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May be harmful based on information for closely related materials. (Benzyl alcohol) symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

Skin Absorption

May be harmful based on information for closely related materials. (Benzyl alcohol)

Ingestion

May be harmful based on information for closely related materials. (Benzyl alcohol) if large amounts are swallowed symptoms may include headache, nausea, dizziness, drowsiness and confusion.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause dermatitis. Symptoms can include redness, rash, swelling and itching.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. May cause an allergic reaction (skin sensitization) based on information for closely related chemicals. 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
Diglycidyl ether of bisphenol A-based epoxy resins, low molecular weight solids	Group 3	Not Listed	Not Listed	
Benzyl alcohol	Not evaluated	Not Listed	Not Listed	

Not known to cause cancer.

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

Conclusions cannot be drawn from the limited studies available. However, these effects were seen in the presence of significant other toxicity. (Diglycidyl ether of bisphenol A-based epoxy resins, low molecular weight solids)

Effects on or via Lactation

Not known to cause effects on or via lactation.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life, based on acute toxicity tests. (Diglycidyl ether of bisphenol A-based epoxy resins, low molecular weight solids)

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Diglycidyl ether of bisphenol A-based epoxy resins, low molecular weight solids	2 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour; semi-static)	1.8 mg/L (Daphnia magna (water flea); 48-hour; static)	11 mg/L (Selenastrum capricornutum (algae); 72-hour; fresh water; static)	
Benzyl alcohol	460 mg/L (Pimephales promelas (fathead minnow); 96-hour)	230 mg/L (Daphnia magna (water flea); 48-hour)		700 mg/L (Pseudokirchneriella subcapitata (algae); 72-hour; static)
Urea, polymer with formaldehyde, butylated	Not available	Not available		Not available

Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
Benzyl alcohol	51 mg/L (Daphnia magna (water flea); 21-day)			

Persistence and Degradability

Expected not to degrade rapidly based on indirect evidence e.g. knowledge from structurally similar substances. (Diglycidyl ether of bisphenol A-based epoxy resins, low molecular weight solids)

Bioaccumulative Potential

This product or its degradation products have the potential to bioaccumulate based on quantitative structure-activity relationships. (Diglycidyl ether of bisphenol A-based epoxy resins, low molecular weight solids)

Mobility in Soil

Studies are not available.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user. This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water.

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
Canadian TDG	UN1866	Resin Solution	3	III

Environmental Hazards Environmentally Hazardous Substance (Diglycidyl ether of bisphenol A-based epoxy resins, low molecular weight solids)

Special Precautions Not applicable

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

Product Identifier: Crack Filler Resin - Part A

Date of Preparation: November 03, 2015

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Date of Last Revision	December 05, 2016
Revision Indicators	The following SDS content was changed on December 05, 2016: SECTION 2. HAZARD IDENTIFICATION; Classification; Label Elements.
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA (“BIOVIA”). Available from Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). 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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