SAFETY DATA SHEET (SDS)

Section 1. Identification

Product identifier	EPOXY CRACK FILLER, Part A
Other means of identification	FF-CF-A
Recommended use and restrictions on use	Epoxy sealing gel
Initial supplier identifier	E4E (717) 645-7567

Section 2. Hazard Identification

Classification of hazardous product (name of the category or subcategory of the hazard class)

Acute toxicity, oral, dermal and inhalation (Category 4)
Skin corrosion/irritation (Category 2)
Skin sensitisation (Category 1)
Serious eye damage/eye irritation (Category 2A)
Carcinogenicity (Category 2)
Hazardous to the aquatic environment, log-term hazard (Category 3)

Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)

Warning
H302+H312+H332 Harmful if swallowed, dermal or if inhaled
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H351 Suspected of causing cancer
H412 Harmful to aquatic life with long lasting effects

Prevention
P201 Obtain special instruction before use P202 Do not handle until all safety precautions have been read and understood P261 Avoid breath dust/fume/gas/mist/vapours/spry. P264 Wash hands/nails/face/eyes thoroughly after handling. P270 Do not eat, drink or smoke when using this product P271 Use only outdoors or in a well ventilated area. P272 Contaminated work clothing should not be allowed out of workplace P273 Avoid release to the environment P280 Wear protective gloves/protective clothing/eye protection/ face protection
Response
IF SWALLOWED: P301 + P312 Immediately call a Poison Center/doctor if you feel unwell. P330 Rinse mouth.
IF ON SKIN: P302 + P352 Wash with plenty of water. P332 + P313 If skin irritation occurs: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash it before reuse.
IF INHALED: P304 + P340 Remove person to fresh air and keep comfortable for breathing. P312 Call a doctor if you feel unwell.
IF IN EYES: P305 + P351 + P338 Rinse cautiously with water. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor. P337 + P313 If eye irritation persists: Get medical attention.
IF EXPOSED OR CONCERNED: P308 + P313 Get medical advice/attention
Storage
P405 Stored locked up
Disposal
P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Other hazards known	None

Section 3. Composition/Information on Ingredients

Chemical name (common name/synonyms)	CAS number or other	Concentration (%)*
Polymère en Bisphénol A / Epichlorohydrine	25068-38-6	> 60 %
Diluent reactive epoxy	2425-79-8	< 25 %
Synthetic Amorphous Silica (SAS)	7631-86-9	< 15 %
Titanium dioxide	13463-67-7	< 25 %

*Déclaration - Cette fiche de données de sécurité comprend une (des) plage(s) de concentrations au lieu de la (des) concentration(s) réelle(s) considéré(s) comme secret(s) industriel(s).

Section 4. First-Aid Measures

Inhalation	IF INHALED: If overexposure remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration or give oxygen by trained personnel If symptoms persist, seek medical attention.
Ingestion	IF SWALLOWED: Immediately call a doctor. Prevent aspiration of vomit. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.
Skin contact	IF ON SKIN: Remove contaminated clothing, wash immediately with soap and water (20 - 30 minutes). If symptoms persist,

	seek medical attention. Wash contaminated clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.
Eye contact	IF IN EYES, Rinse cautiously with water for several minutes (20 - 30 minutes). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Most important symptoms and effects (acute or delayed)	Harmful if swallowed, dermal or if inhaled. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer.
Indication of immediate medical attention/special treatment	In all cases, call a doctor. Do not forget this document.

Section 5. Fire-Fighting Measures

Specific hazards of the hazardous product (hazardous combustion products)

Smoke, toxic fumes, oxides of carbon.

Suitable and unsuitable extinguishing media

In case of fire: Use Carbon dioxide (CO_2), dry chemical, water and alcohol resistant foam.

Special protective equipment and precautions for fire-fighters

During a fire, irritating/toxic fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment as required

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Evacuate non-emergency personnel. Isolate the area and prevent access. Control source of the leak. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8). Prevent the spill spread into drains, sewers, water supplies, or soil. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Methods and materials for containment and cleaning up

Avoid prolonged exposure. Stop leak if you can do it without risk. Spill should be contained with inert material and disposed into suitable retaining area. Do not touch or walk through spilled material. Small volumes of liquid may be contained or absorbed into an appropriate absorbent. Keep away from all watercourses. Do not flush down storm or sanitary sewer. Take precautionary measures against static discharges. Dispose of in accordance with local, provincial and federal regulations.

Section 7. Handling and Storage

Precautions for safe handling

Obtain special instruction before use. Do not handle until all safety precautions have been read and understood Avoid breath dust/fume/gas/mist/vapours/spry. Wash hands/nails/face/eyes thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well ventilated area. Contaminated work clothing should not be allowed out of workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/ face protection.

Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated area. Keep container closed when not in use. Do not handle or store near open flames, heat or other sources of ignition. Store away from incompatible materials (Section 10). Inspect all incoming containers to make sure they are properly labelled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks. Storage temperature: 16 - 27 °C.

Section 8. Exposure controls/Personal Protection

Control parameters (biological limit values or exposure limit values and source of those values)

Exposure limits: CAS 7631-86-9 ACGIH – TLV-TWA No information available OSHA 20 mppcf TWA; 80 (%SiO_2) mg/m^3 TWA; NIOSH 6 mg/m^3 TWA. CAS 13463-67-7 ACGIH – TLV-TWA 10 mg/m^3 TWA.

Appropriate engineering controls

Use product in well-ventilated areas. Do not spray the product. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Supply emergency safety/quick-drench shower, eyewash station and washing facilities available in work area and near handling area. Where such systems are not effective, wear suitable personal protection equipment which performs satisfactorily and meets recognized standards.

Individual protection measures/personal protective equipment

Gloves: Neopren gloves or equivalent; Clothing: Shirts with long sleeves, long pants; Respiratory: Not required if working area is well ventilated. Use a NIOSH approved respirators if the exposure limits are unknown; Equipment: Safety glasses, chemical resistant. Special instructions for protection and hygiene: Wash hands/nails/face thoroughly after handling. Do not eat, drink or smoke when using this product. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use. Educate and train employees in the safe use and handling of this product. Follow all label instructions.

Section 9. Physical and Chemical Properties

Appearance, physical state/colour	Dough	**Vapour pressure**	Not available
Odour	Faint odor	**Vapour density**	Not available
Odour threshold	Not available	**Relative density**	Not available
pH	Not available	**Solubility**	Not available

Melting/freezing point	Not available	**Partition coefficient - n-octanol/water**	Not available
Initial boiling point/range	Not available	**Auto-ignition temperature**	Not available
Flash point	> 100 ºC	**Decomposition temperature**	Not available
Evaporation rate	Not available	**Viscosity**	Not available
Flammability (solids and gases)	Not available	**VOC**	Not available
Upper and lower flammability/explosive limits	Not available	**Other**	None known

Section 10. Stability and Reactivity

Reactivity

Stable under normal conditions.

Chemical stability

Yes, Stable under the recommended storage and handling conditions prescribed.

Possibility of hazardous reactions

Non under normal conditions of storage and use.

Conditions to avoid (static discharge, shock or vibration)

Excess heat.

Incompatible materials

Acids, bases, amines, oxidizing agents.

Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Carbon oxides.

Section 11. Toxicological Information

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)

Harmful if swallowed, dermal or if inhaled. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of causing cancer.

Symptoms related to the physical, chemical and toxicological characteristics

No specific information available.

Delayed and immediate effects (chronic effects from short-term and long-term exposure)

Skin Sensitization – May cause allergic skin reaction. Respiratory Sensitization – No data available;
Germ Cell Mutagenicity – Animal genetic toxicity studies were negative; Carcinogenicity – Possibly carcinogenic to humans; Reproductive Toxicity Not classified; Specific Target Organ Toxicity — Single Exposure – Not classified; Specific Target Organ Toxicity — Repeated Exposure – Not classified; Aspiration Hazard – No information available; Health Hazards Not Otherwise Classified – No data available.

Numerical measures of toxicity (ATE; LD_{50} & LC_{50})

CAS 25068-38-6 LD_{50} Oral - Rat - > 15,000 mg/kg; LD_{50} Dermal – Rabbit – 23,000 mg/kg; LC_{50} Inhalation – has not been determined;
CAS 2425-79-8 LD_{50} Oral - Rat 1134 mg/kg; LD_{50} Dermal Rabbit 1130 mg/kg; LC_{50} Inhalation Not available; CAS 7631-86-9 LD_{50} Oral - Rat >5000 mg/kg; LD_{50} Dermal Rabbit >1130 mg/kg; LC_{50} Inhalation Rat >0.69 mg/l 4h. CAS 13463-67-7 LD_{50} Oral - Rat >5,000 mg/kg; LD_{50} Dermal Rabbit >10,000 mg/kg; ATE not available in this document.

Section 12. Ecological Information

Ecotoxicity (aquatic and terrestrial information)

Toxicity to fish CAS: 25068-38-6 LC_{50}: 1 – 10 mg/l (in the most sensitive species tested)/ LC_{50} 2 mg/l (Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour; CAS 2425-79-8 LC_{50}: 24 mg/l (Danio rerio) 96h; CAS 13463-67-7 LC_{50}: >1,000 mg/l (other fish) 96h
Toxicity to Aquatic Invertebrates: CAS: 25068-38-6 EC_{50}: 1.8 mg/l (Water flea (Daphnia magna) 48h; CAS 2425-79-8 EC_{50}: 75mg/l (Daphnia magna) 48h. CAS 7631-86-9 EL_{50}: >10.000 mg/l (Daphnia magna) 24h; CAS 13463-67-7 EC_{50}: >1.000 mg/l wáter flea (Daphnia magna) 48h
Toxicity to Algae and Aquatic Plants: CAS: 25068-38-6 EC_{50}: 11 mg/l (Fresh water algae (Scenedesmus capricornutum) static test, 72h; CAS 7631-86-9 EL_{50}: >10.000 mg/l (Scenedesmus subspicatus) 72h; CAS 13463-67-7 EC_{50}: >100 mg/l (Pseudokirchneriella subcapitata (green algae) 72h
Toxicity to Bacteria CAS: 25068-38-6 IC_{50}: >42.6 mg/l, (Respiration rates, 18h).

Persistence and degradability	CAS: 25068-38-6 12%, Readily biodegradable. CAS 2425-79-8 No readily biodegradable; CAS 13463-67-7 Pigments are practically not biodegradable
Bioaccumulative potential	CAS: 25068-38-6 Bio-concentration potential is moderate. CAS 2425-79-8 is unlikely low Pow-1.33; CAS 13463-67-7 does not bioaccumulate
Mobility in soil	CAS: 25068-38-6 Potential for mobility in soil is low. CAS 2425-79-8 The product is water soluble and may spread in water systems, highly mobile in soils.
Other adverse effects	Harmful to aquatic life with long lasting effects.

Section 13. Disposal Considerations

Information on safe handling for disposal/methods of disposal/contaminated packaging

Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Section 14. Transport Information

UN number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations

UN 3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, DOUGH, N.O.S. (EPOXY RESIN); CLASS: 9; PG: III

UN number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)

UN 3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, DOUGH, N.O.S. (EPOXY RESIN); CLASS: 9; PG: III

UN number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air)	
UN 3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, DOUGH, N.O.S. (EPOXY RESIN); CLASS: 9; PG: III	
Special precautions (transport/conveyance)	May also be shipped as a LIMITED QUANTITY in accordance with TDG.
Environmental hazards (IMDG or other)	Marine Pollutant
Bulk transport (usually more than 450 L in capacity)	None

Section 15. Regulatory Information

Safety/health Canadian regulations specifics	This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).
Environmental Canadian regulations specifics	Refer to Section 3 for ingredient(s) of the DSL

Safety/health/environmental outside regulations specifics

United States OSHA information: This product is regulated according to OSHA (29 CFR).
United States EPA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14.
United States TCSA information: Refer to the ingredients listed in Section 3.
California Proposition 65: WARNING This product contains Titanium dioxide (CAS 13463-67-7) known to the State of California to cause cancer or other reproductive harm.

Section 16. Other Information

Date of the latest revision of the safety data sheet	March 10, 2021 - version 02
References	Safety Data Sheets from manufacturer/supplier

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
ATE	Acute toxicity estimate
CAS	Chemical Abstract Service
DSL	Domestic Substance List
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
LC	Lethal concentration
LD	Lethal Dosage
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
STEL	Short-term Exposure Limit
TDG	Transport of dangerous goods in Canada
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System