Safety Data Sheet
Epoxy (Group C)

SECTION 1. IDENTIFICATION

Product Identifier	**Epoxy (Group C)**
Other Means of Identification	*Not Applicable*
Recommended Use	Coating.
Restrictions on Use	*Not Available*
Initial Supplier Identifier	**Emerald Coatings** 5914 Wellington Rd., 123 Palmerston, ON, Canada, N0G 2P0 Telephone: 1 (855) 317-4867
Emergency Telephone Number	Toll Free: 1-855-317-4867 (8am – 4pm EST)

SECTION 2. HAZARD IDENTIFICATION

GHS Classification	**SKIN SENSITIZATION – CATEGORY 1** **CARCINOGENICITY – CATEGORY 1A** **SKIN CORROSION/IRRITATION – CATEGORY 2** **SERIOUS EYE DAMAGE/IRRITATION – CATEGORY 2A**
Label Elements **Pictograms**	
Signal Word	**DANGER**
Hazard Statements	H317 – May cause an allergic skin reaction. H350 – May cause cancer. H315 – Causes skin irritation. H319 – Causes serious eye irritation.
Precautionary Statements	
Prevention:	P202 – Do not handle until all safety precautions have been read and understood. P261 – Avoid breathing dust/fume/vapour/spray. P264 – Wash thoroughly after handling. P272 – Contaminated work clothing should not be allowed out of the workplace. P280 – Wear protective gloves/clothing/eye protection/face protection/hearing protection. P284 – Wear adequate respiratory protection.
Response:	P302 + P352 – IF ON SKIN: Wash with plenty of water. P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention. P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 – If eye irritation persists: Get medical advice/attention. P304 + P340 – IF INHALED: remove person to fresh air and keep comfortable for breathing. P342 + P311 – If experiencing respiratory symptoms: Call a POISON CENTER/doctor. P308 + P313 – IF exposed or concerned: Get medical advice/attention. P362 + P364 – Take off contaminated clothing and wash it before reuse.

Storage:	P405 – Store locked up.
Disposal:	P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.
Other Hazards	**May form combustible dust concentrations in air.**
NOTES	2.574% of the mixture consists of ingredient(s) of unknown toxicity.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration*	Common name / Synonyms
Polymer of epoxy resin and bisphenol A	25036-25-3	45 – 70%*	*Not Applicable*
Barium Sulphate	7727-43-7	15 – 40%*	*Not Applicable*
Iron Oxide	1309-37-1	5 – 10%	*Not Applicable*
Aluminium Hydroxide	21645-51-2	5 – 10%	*Not Applicable*
Crystalline Silica (Quartz) (resp.)	14808-60-7	<1%	*Not Applicable*

Notes	*Actual concentration withheld to protect confidentiality. No other ingredients present in this mixture are classified as hazardous to health or the environment to the current knowledge of the supplier.

SECTION 4. FIRST-AID MEASURES

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
Skin Contact	Remove contaminated clothing and shoes. Rinse with soap and water. Avoid further exposure and get medical advice.
Eye Contact	Immediately flush contaminated eye(s) with lukewarm, gently running water for at least 15 minutes while holding the eyelid(s) open. Take care not to rinse contaminated water into a non-affected eye. Remove contact lenses if applicable and easy to do so. Continue rinsing. Seek medical advice.
Ingestion	Rinse mouth. Do NOT induce vomiting. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Seek medical advice.
Most Important Symptoms and Effects, Acute and Delayed	Acute: INHALATION: May be irritating to nose, throat, lungs. SKIN CONTACT: May cause irritation and redness. Hives, other allergic reactions. EYE CONTACT: May cause redness and/or tearing. INGESTION: No known significant effects or hazards. Chronic: May cause cancer.
Immediate Medical Attention and Special Treatment	Treat symptomatically. The exposed person may need to be kept under medical surveillance for 48 hours.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media	
Suitable Extinguishing Media	Use dry chemical, water fog.
Unsuitable Extinguishing Media	Do not use water jet.
Hazardous Combustion Products	May produce oxides of sulphur and other metals.
Specific Hazards Arising from the Product	Dusts may form explosive mixtures with air. Product itself is not flammable.
Special Protective Equipment and Precautions for Fire-Fighters	Wear SCBA for firefighting if necessary. Use water to keep fire-exposed containers cool. Move containers away from fire is safe to do so.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures	Evacuate unnecessary personnel from spill area. Wear appropriate personal protective equipment (See Section 8). Move containers from spill area. Do not generate or breathe dusts.
Methods for Containment and Cleaning Up	Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. For Large Spills: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage	Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store separately from oxidizing agents and strongly alkaline and strongly acidic materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
Barium Sulphate	5 mg/m^3 (TWA)	*Not Available*	15 mg/m^3 (TWA)	5 mg/m^3 (TWA) Respirable Fraction
Iron Oxide	5 mg/ m^3 (TWA) Respirable Fraction	*Not Available*	15 mg/m^3 (TWA) Total Dust	5 mg/m^3 (TWA) Respirable Fraction
Aluminium Hydroxide	1 mg/m^3 (TWA) Respirable Fraction	*Not Available*	*Not Available*	*Not Available*
Crystalline silica (Quartz)	0.025 mg/m^3 (TWA) Respirable Fraction	*Not Available*	30/(%SiO2+2)mg/m^3 (TWA) total dust	250/(%SiO2+5) mppcf (TWA) respirable fraction
Notes	*Exposure limits may vary from time to time and from one jurisdiction to another. Check with local regulatory agency for the exposure limits in your area. STEL = Short-term exposure limit; TWA = Time weighted average; PAHs = Polycyclic aromatic hydrocarbons; TLV = Threshold limit value; REL = Recommended exposure limit			

Appropriate Engineering Controls	Use ONLY with general or local exhaust ventilation to maintain exposure below the exposure limits. Ensure proper ventilation if dust, mist, vapour is created during use. Use explosion-proof ventilation equipment.
Individual Protection Measures	
Eye/Face Protection	Eye protection is required in industrial settings. The wearing of contact lenses is not recommended.
Skin Protection	Wear chemical-resistant impervious gloves fabricated from butyl rubber. Avoid use of leather and wool.
Respiratory Protection	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Other	Have a safety shower and eye wash station readily available in the immediate work area. Use proper industrial hygiene practices. Remove contaminated clothing and do not allow contaminated clothing out of the workplace.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Red Solid (Powder)	**Relative Density (Water = 1)**	*Not Available*
Odour	*Not Available*	**Solubility in Water**	*Not Available*
Odour Threshold	*Not Available*	**Solubility in Other Liquids**	*Not Available*
pH	*Not Available*	**Partition Coefficient, n-Octanol / Water**	*Not Available*
Melting Point and Freezing Point	*Not Available*	**Auto-ignition Temperature**	*Not Available*
Initial Boiling Point and Boiling Range	*Not Available*	**Decomposition Temperature**	*Not Available*
Flash Point	None to 100°C	**Viscosity**	*Not Available*
Evaporation Rate	*Not Available*	**Flammability (solid, gas)**	*Not Available*
Vapour Density (air = 1)	*Not Available*	**Upper and Lower Flammability or Explosive Limit**	*Not Available*

Vapour Pressure	*Not Available*	**Sensitivity to Static/Impact**	Avoid Static Discharge

SECTION 10. STABILITY AND REACTIVITY

Reactivity	No data available.
Chemical Stability	Stable under normal storage conditions.
Possibility of Hazardous Reactions	Hazardous polymerization will not occur.
Conditions to Avoid	Avoid generation of dusts and high temperatures. Take measures to avoid static discharge or other ignition sources.
Incompatible Materials	Keep away from oxidizing agents. Keep out of high temperatures and direct sunlight.
Hazardous Decomposition Products	None under normal conditions. Upon thermal decomposition the product may liberate oxides of sulphur.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

__X__ Inhalation __X__ Skin contact __X__ Eye contact ___ Ingestion

Acute Toxicity	
LC50 (inhalation)	*Not Available*
LD50 (oral)	Barium Sulphate – LD50 – >5005 mg/kg (Rat) Iron Oxide – LD50 – 10000 mg/kg (Rat) Aluminium Hydroxide – LD50 – 5000 mg/kg (Rat) Crystalline Silica (Quartz) – LD50 – 500 mg/kg (Rat)
LD50 (dermal)	*Not Available*
Notes	Not expected to be acutely toxic.
Skin Corrosion / Irritation	May be irritating.
Serious Eye Damage / Irritation	Causes severe irritation.
Inhalation	May be slightly irritating to nose and throat (Mechanical).
STOT (Specific Target Organ Toxicity) - Single Exposure	Not expected.
Aspiration Hazard	Not reported.
STOT (Specific Target Organ Toxicity) - Repeated Exposure	Not reported.
Respiratory and/or Skin Sensitization	Skin irritant.
Carcinogenicity	IARC suspects Silica (Quartz) of being carcinogenic (Group 1) based on human data. ACGIH suspects Silica (Quartz) of being carcinogenic (Group A2).
Reproductive Toxicity	
Development of Offspring	Not reported.
Sexual Function and Fertility	Not reported.
Effects on or via Lactation	Not reported.
Germ Cell Mutagenicity	Not expected to be a mutagen.

Interactive Effects	Not reported.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity	Unknown ecotoxicity for mixture. 85.98% of the mixture consists of components of unknown hazards to the aquatic environment.		
	Ingredient	**Species**	**LC/EC_{50}**
	Not Available	*Not Available*	*Not Available*
Persistence and Degradability	*Not Available*		
Bioaccumulative Potential	*Not Available*		
Mobility in Soil	*Not Available*		
Other Adverse Effects	*Not Available*		

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods	Canadian Environmental Protection Act: All ingredients are listed in the DSL or are not required. Dispose of in accordance with all federal, provincial/state, and local regulations. Consult with your local supplier for additional information. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Technical Name (for N.O.S. entry)	Transport Hazard Class(es)	Packing Group
Canadian TDG Regulations*					
49 CFR/DOT*					
IATA Regulations*					
IMDG Code*					
*Not Regulated for Transport.					

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations	Canadian Environmental Protection Act (CEPA): All components of this product are on the Canadian DSL. United States Inventory (TSCA): All components are listed or exempt.

SECTION 16. OTHER INFORMATION

Date of Creation	May 23, 2019
Date of Latest Revision	May 23, 2019
Notes	Health Material Information System (HMIS): Health: 0 Flammability: 0 Reactivity: 0 Physical Hazards: 0 HMIS Ratings: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe; * = Chronic Effects.
Disclaimer	This Safety Data Sheet (SDS) was prepared by iHazmat Regulatory Ltd., (www.iHazmat.com) using information and classifications provided by Emerald Coatings. All information in this SDS is offered for your consideration and guidance when working with this product and is accurate to the best of our knowledge. No guarantee can be made that the hazards described herein are the only hazards that exist.

SDS compliant with WHMIS 2015