Safety Data Sheet
Polyurethanes (Group B)

SECTION 1. IDENTIFICATION

Product Identifier	**Polyurethanes (Group B)**
Other Means of Identification	*Not Applicable*
Recommended Use	Coating powder.
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	**CARCINOGENICITY – CATEGORY 2**
Label Elements **Pictograms**	
Signal Word	**WARNING**
Hazard Statements	H351 – Suspected of causing cancer.
Precautionary Statements	
Prevention:	P202 – Do not handle until all safety precautions have been read and understood. P280 – Wear protective gloves/protective clothing/eye protection/face protection.
Response:	P308 + P313 – IF exposed or concerned: Get medical advice/attention.
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	*Not Applicable*

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration*	Common name / Synonyms
Carbon Black	1333-86-4	0.5 – 5%	*Not Applicable*
**Limestone	1317-65-3	15 – 40%	*Not Applicable*
**tetrahydro-1,3,4,6-tetrakis(methoxy methyl)imidazo[4,5-d]imidazole-2,5(1 H,3H)-dione	17464-88-9	1 – 5%	*Not Applicable*

Notes	*Actual concentration withheld to protect confidentiality. Concentration ranges as per Health

	Canada's prescribed ranges. **One or more of the following ingredients (pigments) may be present in the mixture. However, the ingredients do not contribute to health hazard classification under the GHS or WHMIS,

SECTION 4. FIRST-AID MEASURES

Inhalation	Remove victim to fresh air. If breathing is difficult, seek medical advice.
Skin Contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
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	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.
Most Important Symptoms and Effects, Acute and Delayed	Acute: INHALATION: May be irritating to nose, throat, lungs when present above concentration limits. SKIN CONTACT: No known significant effects or hazards. 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. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media	
Suitable Extinguishing Media	Use dry chemical powder, carbon dioxide, water fog or foam.
Unsuitable Extinguishing Media	Do not use water jet.
Hazardous Combustion Products	May produce oxides of carbon.
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. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for Containment and Cleaning Up	Implement spill control plan. 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. Dispose of via a licensed waste disposal contractor.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling	Close container after each use. Do not transfer contents to unlabeled containers. Wash thoroughly after handling and before eating or smoking. Precautions should be taken to prevent the formation of dusts in concentrations above flammable, explosive or occupational exposure limits. Keep away from open flames, hot surfaces and sources of ignition. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. If material is a coating: do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves. Combustible dust clouds may be created where operations produce fine material (dust). Avoid formation of significant deposits of material as they may become airborne and form combustible dust clouds. Build up of fine material should be cleaned using gentle sweeping or vacuuming in accordance with best practices. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.
Conditions for Safe Storage	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready to use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	**ACGIH® TLV®**	**OSHA PEL**	
Carbon Black	3 mg/m^3 (TWA) Respirable Fraction	3.5 mg/m^3 (TWA) Respirable Fraction	
Limestone	*Not Available*	5mg/m^3 (TWA) Respirable Fraction	15 mg/m^3 (TWA) Total Dust
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; TLV = Threshold limit value; REL = Recommended exposure limit		

Appropriate Engineering Controls	Use 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. Wear protective clothing.

Respiratory Protection	Not normally required for most uses. If use produces dusts and risk assessment indicates it is necessary, use an approved NIOSH half-face or full-face respirator.
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	Solid Powder variable colour	**Relative Density (Water = 1)**	1.2 – 1.9
Odour	Odourless	**Solubility in Water**	Insoluble
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**	450°C to 600°C
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**	Lower – 20 g/m^3 Upper – 70 g/m^3
Vapour Pressure	*Not Available*	**Sensitivity to Static/Impact**	Not sensitive

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.
Incompatible Materials	Keep away from oxidizing agents.
Hazardous Decomposition Products	None under normal conditions. Upon thermal decomposition the product may liberate oxides of carbon, nitrogen.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

__X__ Inhalation __X__ Skin contact __X__ Eye contact ___ Ingestion

Acute Toxicity	
LC50 (inhalation)	Carbon Black – LC50 – Dusts – >4.6 mg/L (Rat – 4h) Limestone – LC50 – Dusts – >5 mg/L (Rat – 4h)
LD50 (oral)	Carbon Black – LD50 – >8000 mg/kg (Rat) Limestone – LD50 – >5000 mg/kg (Rat)
LD50 (dermal)	Limestone – LD50 – >5000 mg/kg (Rabbit)
Notes	Not expected to be acutely toxic. No data on mixture itself. ATE oral = 12998.2 mg/kg. ATE dermal = 28595.9 mg/kg. ATE inhalation = 286 mg/L.
Skin Corrosion / Irritation	May be mildly irritating.

Serious Eye Damage / Irritation	May be mildly irritating.
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	Not expected.
Carcinogenicity	IARC reports sufficient evidence for classification as human carcinogen in category 2B. Risk depends on duration and level of exposure.
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.		
	Ingredient	**Species**	**LC/EC$_{50}$**
	Limestone	Algae	EC$_{50}$ = >200 mg/L (72h)
		Rainbow Trout	LC$_{50}$ = >10000 mg/L (96h)
	Carbon Black	Algae	EC$_{50}$ = >10000 mg/L (72h)
		Daphnia Magna	EC$_{50}$ = >5600 mg/L (24h)
		Danio rerio (fish)	LC$_{50}$ = >1000 mg/L (96h)
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	February 28, 2019
Date of Latest Revision	March 13, 2019
Notes	Health Material Information System (HMIS): Health: 2 Flammability: 0 Reactivity: 0 Physical Hazards: E 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