Zerous

Material Safety Data Sheet ZeraBond 35 PART A

PRODUCT INFORMATION

Manufacturer: Zeraus Products Inc. 250 Rayette Road, Unit 18 Vaughan, Ontario L4K 2G6

PRODUCT INFORMATION

Product Identifier: **ZeraBond 35 PART A** Application and Use: 100% Solids Epoxy Concrete Bonding Agent Product Description: Two-component 100% solids Epoxy Coating (epoxy resin blend)

HAZARD RATING SYSTEM (USA):

Health: 2 Flammability: 0 Reactivity: 0

WHMIS Classification (Canada): Class D, Division 2, Subdivision B: irritant

TRANSPORTATION OF DANGEROUS GOODS INFORMATION: Not Regulated

EMERGENCY TELEPHONE NUMBERS

Business: (905) 761-9920 24 Hours: (416) 574-5154

LABEL PRECAUTIONS

NOT REGULATED. HARMFUL IF SWALLOWED OR INHALED. MILD SKIN AND EYE IRRITANT.

Keep container closed. Use only with adequate ventilation Wash thoroughly after handling Avoid breathing vapours Avoid contact with eyes, skin and clothing Keep away from children Do not dispose down the drains

HAZARDOUS INGREDIENTS					
Ingredients	CAS#	%(weight)	LD/50 Route/Species		
Diglycidyl Ether of Bisphenol-A	25068-38-6	40-100%	30g/kg(Rat-Oral)		
2-Methylphenyl Glycidyl Ether	2210-79-9	5-15	4000mg/kg(Rat-Oral) >2000mg/kg(Rabbit-Skin)		

PHYSICAL DATA

Physical State: Liquid Specific Gravity: 1.15 Solubility in Water: Insoluble Boiling Point: n/av Freezing/Melting Point: n/av Viscosity: 1400 cps Evaporation Rate: n/av Volatile: (voc): less than 1 % Vapour Density: n/av Appearance: clear colourless liquid

POTENTIAL HEALTH EFFECTS

Effect of Overexposure:

INHALATION: Do not heat the material. Vapours or mist generated from heating the material or as from exposure in poorly ventilated areas are irritating and cause nasal discharge. Coughing and discomfort in nose and throat. Prolonged or repeated overexposure may result in lung damage.

EYES: Cause irritation, experienced as pain, with excess blinking and tear production

SKIN: Causes skin irritation. It may cause skin sensitization.

INGESTION: Acute (brief exposure): Low toxicity causes irritation. Chronic (prolonged exposure): causes burning of mouth, throat, and stomach, nausea, vomiting, and diarrhea.

INGESTION: CHRONIC: Refer to acute ingestion.

Toxic effects or reproduction:	No
Teratogenicity:	No
Mutagencity:	No
Carcinogenicity:	No

Acute or chronic exposure should be avoided as it will increase the toxicological problems mentioned in this section and may aggravate respiratory problems. Repeated skin contact may cause a persistent irritation or dermatitis. Repeated inhalation may cause lung damage.

FIRST AID MEASURES

Emergency procedures:

INHALATION: In the case of overexposure, remove to fresh air. Get medical attention if the victim is in respiratory distress.

EYE CONTACT: Flush eyes immediately with large amounts of running water for at least 15 minutes while holding eyelids open until irritation subsides. Do not attempt to neutralize with chemical agents. Obtain medical attention immediately.

SKIN CONTACT: Wash immediately with plenty of soap and water. Remove and clean all contaminated clothing and launder before reuse.

INGESTION: If swallowed, drink two glasses of water. Do not induce vomiting. The material is corrosive. Do not give anything to mouth to an unconscious person. Get prompt medical attention.

PREVENTIVE MEASURES

PERSONAL PROTECTION: The selection of personal protective equipment varies depending upon conditions of use. When handling product wear long sleeves, chemical resistant gloves and safety glasses with side shields. Where splashing during mixing may occur wear full face shield. Where concentrations in air may exceed the occupational exposure limits and where engineering work practices or other means of exposure reduction are not adequate, approved respirators may be necessary to prevent overexposure by inhalation. The respirators may not be necessary for handling the materials in outdoor environment. Eye wash station (sink) or shower facility near the job is recommended in case of emergency.

ACCIDENTAL RELEASE MEASURES

PROCEDURE IN CASE OF LEAKS:

Prevent spills from entering sewers, watercourses or low areas. Absorb with sand or other absorbent material. Residue may be removed with hot water and detergent. All precautions should be taken when cleaning the spill with solvent.

ENVIRONMENTAL PRECAUTIONS: Avoid discharge to sewers or waterways.

SPILL CONTROL AND DISPOSAL: Dispose of sand and rinse water according to municipal, provincial or federal laws for disposal of chemicals.

HANDLING AND STORAGE

HANDLING STORAGE AND SHIPPING: Keep container closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. Do not handle or store near an open flame, sources of heat, or sources of ignition. Protect material from direct sunlight. This product will accumulate static charges which may cause an incendiary electrical discharge. Use proper grounding procedures. Empty product containers may contain product residue. DO NOT REUSE.

FIRE AND EXPLOSION DATA

Flashpoint and Method: 141 C (T.C.C.)

Auto ignition Temperature: Not applicable

Flammable Limits: Not Available

GENERAL HAZARDS: Combustible liquid; may release vapours that form combustible mixtures at or above the flash point. Toxic gases will form upon combustion.

FIRE FIGHTING: Wear NIOSH-approved self-contained breathing apparatus with independent air supply. Wear complete body protective butyl rubber clothing. Personnel in vicinity and downwind should be evacuated.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, and carbon monoxide, various hydrocarbons, phenol.

REACTIVITY DATA

GENERAL: This product is stable and hazardous polymerization will not occur under normal conditions.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID: Excessive heating. Avoid contact with strong acids and alkalis.

HAZARDOUS DECOMPOSITION: carbon monoxide

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Material Safety Data Sheet ZeraBond 35 PART B

PRODUCT INFORMATION

Manufacturer: Zeraus Products Inc. 250 Rayette Road, Unit 18 Vaughan, Ontario L4K 2G6

PRODUCT INFORMATION

Product Identifier: **ZeraBond 35 PART A** Application and Use: 100% Solids Epoxy Concrete Bonding Agent Product Description: Two-component 100% solids Epoxy Coating (Amine curative)

HAZARD RATING SYSTEM (USA):

Health: 3 Flammability: 0 Reactivity: 0

WHMIS Classification (Canada): Class D, Division 2, Subdivision B., Class E, corrosive

TRANSPORTATION OF DANGEROUS GOODS INFORMATION:

Amines, liquid, Corrosive, N.O.S. (2,4,6, Tridimethylaminomethyl Phenol) Hazard Class: 8 ID Number: UN 2735 Packing Group: 111

EMERGENCY TELEPHONE NUMBERS

Business: (905) 761-9920

24 Hours: (416) 575-5154

LABEL PRECAUTIONS

CRROSIVE MATERIAL. HARMFUL IF SWALLOWED. CAN CAUSE EYE AND SKIN BURN. MAY CAUSE SENTIZATION.

Keep container closed. Use only with adequate ventilation Wash thoroughly after handling Avoid breathing vapours Avoid contact with eyes, skin and clothing Keep away from children

HAZARDOUS INGREDIENTS						
Ingredients	CAS#	%(weight)	LD/50 Route/Species			
Polymer of Dimer Acids & Polyamines	6841023	60-100	LD50->16ml/kg(Rat-Oral) LD50-6.5ml/kg(Rabbit-Dermal)			
2,4,6Tridemethyl-amino methylphenol	90-72-2	1-5	LD50-1.28gm/kg(Dermal-Rabbit) LD50-2.5gm/kg(Oral-Rat)			

Aromatic Hydrocarbon

PHYSICAL DATA

Physical State: Liquid Specific Gravity: 1.18 Vapour Pressure: 0.70mm Hg @ 21°C (70°F) Solubility in Water: Slight (0.1-1%) Boiling Point: n/av Freezing/Melting Point: n/av Viscosity: 3700 cps Vapour Density: n/av Evaporation Rate: n/av % Volatile: (voc): 10gm./l Odour: Characteristic amine Appearance: dark amber

POTENTIAL HEALTH EFFECTS

Effect of Overexposure:

INHALATION: Irritating to respiratory tract. Coughing and chest pain may result if inhaled directly.

EYE CONTACT: Contact of undiluted product with the eyes quickly causes irritation and pain and may cause burns, necrosis and permanent injury.

SKIN CONTACT: can cause skin burns. Can cause allergic skin reaction and sensitization.

INGESTION: Swallowing may cause severe burns to the mouth, throat and stomach. May cause vomiting, nausea and dizziness. Loss of consciousness may occur. Drowsiness may occur. Weakness and incoordination may occur.

Toxic effects or reproduction:	No
Teratogenicity:	No
Mutagencity:	No
Carcinogenicity:	No

Acute or Chronic Exposure: Repeated and/or prolonged exposure may cause allergic reaction/sensitization. Repeated and/or prolonged exposures may result in adverse eye effects, adverse skin effect. Dryness of nasal passages may be experienced when material is inhaled over a long period of time.

FIRST AID MEASURES

Emergency procedures:

In the event of an emergency, remove the victim from further exposure, send for medical assistance, and initiate the following emergency procedures:

INHALATION: If inhaled, remove victim to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention.

EYE CONTACT: Flush with water for at least 15 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. Get medical attention. If medical care is not promptly available, continue to irrigate for one hour.

SKIN CONTACT: Immediately remove contaminated clothing. Wash with soap and water and maintain gentle and continuous irrigation for 15 minutes. Launder contaminated clothing before reuse. Contact a physician if irritation develops.

INGESTION: Give two glasses of water. Get medical attention immediately. Do not induce vomiting. Never give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and as the clinical condition of the patient.

PREVENTIVE MEASURES

PERSONAL PROTECTION: The selection of personal protective equipment varies depending upon conditions of use. When handling product wear long sleeves, chemical resistant gloves and safety glasses with side shields. Use the product with an adequate ventilation or outdoor. Eye wash station (sink) or shower facility near the job is recommended in case of emergency.

ACCIDENTAL RELEASE MEASURES

PROCEDURE IN CASE OF LEAKS:

Extinguish and eliminate source of ignition until area is determined to be free from explosion or fire hazards. Prevent spills from entering sewers, watercourses or low areas. Absorb with sand or other absorbent material (do not use sawdust). Residue may be removed with hot water and detergent. Flush small spills with water.

ENVIRONMENTAL PRECAUTIONS: The product is toxic to aquatic life in liquid form. Avoid discharge to sewers or waterways.

SPILL CONTROL AND DISPOSAL: Dispose of sand and rinse water according to municipal, provincial or federal laws for disposal of chemicals.

HANDLING AND STORAGE

HANDLING, STORAGE AND SHIPPING: Avoid all skin contact. Avoid breathing vapours of heated materials. Keep away from sun, heat, sparks and open flame. Wash thoroughly after handling.

FIRE AND EXPLOSION DATA

Flashpoint and Method: >100^NC (T.C.C.) Autoignition Temperature: Not available Flammable Limits: Not available

GENERAL HAZARDS: Combustible liquid; may release vapours that form combustible mixtures at or above the flash point. Toxic gases will form upon combustion.

FIRE FIGHTING: Personnel in vicinity and downwind should be evacuated. Fire fighters should wear approved self contained breathing apparatus and full protective clothing.

HAZARDOUS COMBUSTION PRODUCTS: May generate toxic or irritating combustion products. Ammonia, oxides of carbon (CO, CO2) and oxides of Nitrogen.

REACTIVITY DATA

GENERAL: This product is stable and hazardous polymerization will not occur under normal conditions.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID: Excessive heating. Avoid contact with acids.

HAZARDOUS DECOMPOSITION: None under normal storage conditions.

PREPARATION

Prepared By: A. Zaghloul Zeraus Products Inc. 250 Rayette Road, Unit 18 Vaughan, Ontario L4K 2G6 <u>March 2017</u>