

SAFETY DATA SHEET

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Date Prepared: May 1, 2015

1. Product and Company Identification

CEDA Specialty Services LP 2130-121 Ave. NE Edmonton, Alberta T6S 1B1 Canada (780) 472-6766

Product Name: E.S. 814

Product Type: Graphite Based Sealant / Packing Product Description: Black Putty-Like Compound

General Use : Injectable Sealant

2. Hazards Identification

GHS Classification : Carcinogenicity, 1A

Skin Irritation, 2 Eye Irritation, 2B

GHS Label Elements: Signal Word: Warning





Hazard Statements:

H315 / 320 Causes Skin and Eye Irritation

H333 May be harmful if inhaled. (respirable dust, see NOTE below)

H303 May be harmful if swallowed

H335 May cause respiratory irritation

Precautionary Statements:

P261 Avoid breathing dust/ heated vapors

P262 Do not get in eyes, on skin, or on clothing

P285 In case of inadequate ventilation wear respiratory protection

P281 Use personal protective equipment as required

P301/P330/P331 If Swallowed: Rinse mouth, Do NOT induce vomiting.

P301/P310 If Swallowed: Immediately call a Poison Center or Physician

P333/P313 If skin irritation or rash develops: Get medical attention.

P302/P352 If on skin: Wash with plenty of soap and water

P305/P351/P338 If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses if easy to do. Continue

Rinsing.

P337/P313 If eye irritation persists: Get medical attention

P342/P311 If experiencing respiratory symptoms: Get medical attention.

P233 Keep container tightly closed

P210 Keep away from open flames. - No Smoking

P501 Dispose of observing all Federal, State and Local regulations.

NOTE: THIS PRODUCT IN ITS PURCHASED FORM DOES NOT PRESENT AN INHALATION HAZARD FROM FIBERS OR DUST, AS IT IS A PUTTY-LIKE COMPOUND, FIBERS AND DUST ARE NOT AIRBORN UNDER NORMAL HANDLING.

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3. **Composition / Information on Ingredients**

| Ingredients | CAS No. | % by weight |
|---|---------------------|--------------|
| Natural Graphite | 7782-42-5 | 20-50 |
| Carbon Fiber | 7440-44-0 | 1-20 |
| Crystalline Silica Synthetic Binder* | None Proprietary | 1-20 1-20 |

^{*} Synthetic Binder is not considered hazardous according to OSHA criteria

4. **First Aid Measures**

DO NOT INGEST. Oral toxicity not determined. Ingestion:

Do NOT induce vomiting. Ingestion not likely. Call a physician or get medical help immediately.

Inhalation: Remove to fresh air. If symptoms persist,

seek medical attention.

Skin Contact: Wash with soap and water, consult physician if

rash develops.

Eye Contact: Flush with water 15 minutes. If symptoms persist,

Seek medical attention.

5. **Fire Fighting Measures**

Recommended Extinguishing Agent:

Foam, Dry Chemical, Carbon Dioxide, Water Fog

Special Fire Fighting Procedures:

Self contained breathing apparatus and protective clothing

should be worn in fighting fires involving chemicals. (Professionally Trained Personnel).

Hazardous Products Formed by Fire

or Thermal Decomposition:

CO, CO2, Smoke, Incomplete Combustion Products. Oxides of Sulfur, Nitrogen,

and Phosphorous may also be formed.

Unusual Fire or Explosion Hazards:

Closed containers may rupture when exposed to extreme

heat or fire conditions

Compressed Gases: None

Pressure at Room Temperature: Does not apply

6. Accidental Release Measures

Steps to be taken in cases of spill or leak:

Wear proper personal protective equipment. Remove any sources of

ignition from the area and allow hot surfaces to cool. Return

uncontaminated material to metal container and seal container tightly. Dispose of contaminated material or waste. Clean up with mineral spirits.

7. **Handling and Storage**

Storage: Cool, dry, storage. Store in closed containers.

Handling: Avoid contact with skin and eyes. Do not breathe heated vapors. This

product in its purchased form does not create an inhalation hazard from fibers or dust. If grinding or sanding or any other process is performed to this compound will cause airborne particles wear appropriate respirator to avoid breathing any dust or vapors. Wear appropriate safety gear as required in work area.

8. Exposure Controls / Personal Protection

Exposure Limits ACGIH OSHA OTHER

Ingredients (TLV) (PEL)

Natural Graphite 2.0 mg/m3 TWA Respirable Dust N/E 3 mg/m3 for nuisance dust

Carbon Fiber N/E N/E

Crystalline Silica

Cristobalite 0.05 mg/m3 (respirable) 0.025 mg/m3 (respirable)

Tridymite 0.05 mg/m3 (respirable)

Quartz 0.1 mg/m3 (respirable) 0.025 mg/m3 (respirable)

Synthetic Binder 5mg/m3 TWA 5mg/m3

(as a mist, if mist is generated) 10 mg/m3 STEL

Personal Protective Equipment (PPE) Eyes: Safety Glasses

Full face shield recommended. (during injection process)

Skin: Chemical resistant gloves.

Respiratory Protection: NIOSH approved for organic vapors and dust.

Other Protective Clothing or Equipment: Coveralls or other protective clothing. Safety equipment as required in area.

Work / Hygienic Practices: Avoid contact with skin. Wash hands before eating.

Engineering Controls: Ventilation: (if heated) Local exhaust if poorly ventilated area or in confined spaces.

9. Chemical and Physical Properties

Appearance: Black putty-like compound

Odor: Mild Odor pH: 7.03 Solubility in Water: NIL

Specific Gravity: 1.9 (compressed) (H2O =1)

Evaporation Rate: Not Applicable
Boiling Point: Not Applicable
Melting Point: Not Applicable
Vapor Pressure: Not Established

Vapor Density: Not Established

VOC Content: None

Flash Point: >205 F Method: ASTM D93-13 Pensky Martens Closed Cup (PMCC)

Flammable Limits:

LEL: Not Established UEL: Not Established

10. Stability and Reactivity

Stability: Stable
Hazardous Polymerization: Will not occur

Hazardous Decomposition

Or By-Products: CO, CO2, Smoke, Incomplete Combustion Products. Oxides of Sulfur, Nitrogen,

and Phosphorous may also be formed.

Incompatibility: Strong Oxidizers and Strong Acids, Mineral Acids,

Alkalies,

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11. <u>Toxicology Information</u>

Primary Routes of Entry: Inhalation and contact.

Signs and Symptoms of Overexposure: Inhalation: (heated vapors), respiratory irritation.

Eyes: Redness and irritation.

Skin: Chemical dermatitis, redness and itching.

Existing Conditions Aggravated

by Exposure: Pre-existing skin condition if prolonged exposure

to skin. (Wear chemical resistant gloves)

Respiratory conditions if exposed to dust, fibers or heated vapors. Dust exposure is not a hazard with this product under normal use.

Product is in a putty form.

Carcinogenicity

NTP: Crystalline Silica (respirable size) Known to be a Carcinogen

IARC: Crystalline Silica, Group 1 IARC

OSHA Regulated: NO

Toxicity: Mixture, Not determined

Synthetic Binder: Oral LD50 >5000 mg/kg (rat)

Dermal LD50 >2000 mg/kg (rat)

Acute Health Hazards: Skin: Contact on bare skin can cause chemical dermatitis,

redness, itching

Inhalation: (heated vapors), respiratory irritation.

Chronic Health Hazards: Inhalation: Crystalline Silica, respirable size NTP Known Carcinogen.

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12. <u>Ecological Information</u>

Synthetic Binder Only: Acute aquatic toxicity values are greater than 1000 mg/l.

Regarded as inherently biodegradable.

13. <u>Disposal Considerations</u>

Recommended Methods of Disposal:

RCRA 40 CFR 261 Classification: This product as purchased does not fall under current US EPA RCRA Definitions of Hazardous Waste.

Certain state regulations could affect whether a material is considered a hazardous waste upon disposal. It must also be noted that a material can become a hazardous waste if it is mixed with or comes in contact with a hazardous substance during use. Under RCRA it is the responsibility of user of a product to determine at the time of disposal, whether a material should be classified as a hazardous waste.

14. <u>Transport Information</u>

DOT (49 CFR 172): Not Regulated

IATA: Not Regulated

Liquid / Solid (per ASTM D 4359-90) : Material is a solid

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15. REGULATORY INFORMATION

CERCLA HAZARDOUS SUBSTANCES (40 CFR Part 302.4): This product is not reportable under 40 CFR Part 302.4.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR Part 355): This product does ont contain any SARA 302 Extremely Hazardous Substances.

SARA TITLE III SECTION 311/312 HAZARDOUS CATEGORIZATION (40 CFR Part 370): Certain ingredients of this product are regulated under Sara Title III Section 311/312, see section 3 of this MSDS.

SARA TITLE III SECTION 313 (40 CFR Part 372): None

U.S. INVENTORY (TSCA): Any chemical substances (as defined in 40 CFR Part 710.2), that are contained in, or used in the manufacture of this product, are reported in the EPA TSCA Inventory. (As required per 40 CFR 710.3)

CALIFORNIA PROPOSITION 65: Crystalline Silica

CANADA WHMIS: Ingredient Disclosure List: Crystalline Silica, quartz -- Crystalline Silica, Tridymite --

Crystalline Silica, Cristobalite

WHMIS Classification: Crystalline Silica, quartz:, D2A

EUROPEAN UNION: Crystalline Silica: CLP Carc.1A, Carbon Fiber: CLP Eye Irit. 2, Natural Graphite: CLP STOT SE3

OZONE DEPLETERS: * This product is not manufactured with or contains any Class I or Class II Ozone Depleting Chemicals. (ODC's)

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16. OTHER INFORMATION

The information contained in this MSDS sheet is based upon data supplied by our suppliers and data determined by us in our facilities at the time these products were formulated. We have reviewed any information that we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety data in this sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. If after reviewing this MSDS you have determined that this product poses unusual risks to you, your plant, or your plant personnel, or if you cannot comply fully with all safety recommendations, do not use this product. This product is intended for a temporary repair. The responsibility for whether or not the product is suitable for use rest solely with the purchaser. We recommend that the product be tested prior to use. Your use of this information is beyond our control, therefore, the information is provided without warranty expressed or implied. We accept no liability beyond the purchase price of the material.

Estimated HMIS® Code:

Health Hazard: *1 *See section 11 for chronic effects.

Flammability Hazard: 1
Physical Hazard: 0

Personal Protection: NPCA recommends that PPE codes be determined by the employer, who is familiar with the actual

conditions under which chemicals in the facility are used.

Attn: Technician

(For industrial use by professionally trained personnel only) Steps should be taken to insure that the injection pressure in conjunction with pressure that may occur from gassing off of the compound does not exceed the pressure limitations of the piping system. If the compound is gassing off, gasses should be vented. Also, be aware it is quite common that the application temperature will exceed the compound flash point. Be aware of the possibility of a flash and take necessary precautions. See section 8 of SDS for personal protective equipment. Ventilation may be needed during heating/curing stage to exhaust organic vapors resulting from vaporization of certain organic agents. Always avoid direct contact with smoke and vapors being emitted from the compound during the heating/curing process. These vapors may be irritating to the skin, eyes and respiratory system. Read product technical data and safety information before use.

PREPARATION INFORMATION

Prepared By: Safety Department

Company: CEDÁ Specialty Services LP Revision Date: 05-01-15 Revision: D