

1720 Prosperity Court Chippewa Falls, WI 54729 <u>www.chemceed.com</u>

SAFETY DATA SHEET

REVISED DATE: 05-27-15

Section 1: IDENTIFICATION

| PRODUCT: | Epoxidized Soybean Oil (ESO) |
|--|---|
| SYNONYMS: | Epoxidized Soya bean Oil (ESBO) |
| RECOMMENDED USE: | Plasticizer |
| SUPPLIER: | ChemCeed LLC 1720 Prosperity Court Chippewa Falls, WI 54729 |
| GENERAL INFORMATION: EMERGENCY INFORMATION: | 715-726-2300 CHEMTREC 800-424-9300 |

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: **GHS Classification:** Classification (29CFR1910.1200 Appendix A): This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) GHS Physical Hazard: Not listed GHS Health Hazard: Not listed GHS Environmental Hazard: Not listed **GHS Labeling Symbol:** None **Signal Word:** None **Hazard Statements:** None **Precautionary Statements:** None

| HAZARD | HMIS | NFPA |
|------------|------|---------------|
| Toxicity | 0 | Not Available |
| Fire | 1 | Not Available |
| Reactivity | 0 | Not Available |

Safety Data Sheet Page 1 of 5 Distributed By: J.H. CALO COMPANY, INC. A DIVISION OF R.E. CARROLL, INC. 1570 NORTH OLDEN AVENUE EWING, N.J. 08638-3204 609-695-6211/800-257-9365

Section 3: COMPOSITION AND INFORMATION ON INGREDIENTS

| No. | Component | Amount % | OSHA | | ACGIH | |
|-----|------------------------|----------|-----------|-----------|-----------|-----------|
| | CAS REG.NO. | | TWA | STEL | TWA | STEL |
| 1 | Epoxidized Soybean Oil | 100 | Not | Not | Not | Not |
| | 8013-07-8 | | Available | Available | Available | Available |

Section 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

Inhalation: Remove to fresh air. If not breathing, provide artificial respiration. If breathing is difficult give oxygen. Consult a physician.

Ingestion: Induce vomiting as directed by medical personnel. Get medical attention. Never give anything by mouth to an unconscious person.

Skin: Flush the area with soap and plenty of water. Remove material from clothing. Wash clothing before reuse. **Eyes:** Rinse immediately with water making sure to rinse under the eyelids.

Section 5: FIRE FIGHTING MEASURES

Flash Point: 315 °C Auto-ignition Temperature: Not Available. Lower Explosion Limit: Not Available. Upper Explosion Limit: Not Available. Flammability Classification: Not Available. Suitable Extinguishing Media: Dry chemical, carbon dioxide, water spray or alcohol foam. Do not use a solid water stream because it may spread fire. Products of Combustion: Acrolein can be generated at 550 F. When burned, the following hazardous products of combustion can occur: Carbon oxides Hazardous organic compounds Fire Fighting Equipment/Instructions: As in any fire wear self-contained breathing apparatus pressure demand MSHA/NIOSH approved, or equivalent, and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: See Section 8

Special Properties: None Listed

Environmental Precautions: Do not allow this product to contaminate ground water system. Do not let this product enter drains, sewers or water ways.

Method for Containment: Prevent further leaking or spillage

Methods for Clean-up: Absorb spill with inert material such as dry sand or earth and place in a chemical waste container for disposal. Dispose of promptly.

Section 7: HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin and clothing.

Storage: This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage. It is recommended that containers be raised above floor or ground during extended storage periods to prevent container corrosion due to standing water.

Safety Data Sheet Page 2 of 5

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Investigate engineering techniques to reduce exposures. Provide ventilation if necessary to minimize exposures. If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Personal Protective Equipment (PPE) -

Respiratory Protection: Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. If exposure cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for a given application. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Eye/Face Protection: Use good industrial practice to avoid eye contact, such as splash guards or chemical goggles. **Hand Protection:** Wearing rubber gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

Body: minimize skin contamination by following good industrial hygiene practice.

Other Protective Equipment: None Listed.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light Yellow Viscous Liquid Odor: Slight vegetable Odor Odor threshold: Not Available pH: Not Available Melting point/freezing point: 0°C Initial boiling point and boiling range: Decomposes on heating Flash point: 315°C Evaporation rate: Very Low Flammability: Not Available Upper/lower flammability or explosive limit: Not Available Vapor pressure: Very Low (< 0.1 mmHg (77 °F (25 °C)) Vapor density: Nonvolatile Relative density: 0.994 Water=1 (liquid) Solubility: Insoluble in water; soluble in alcohols, ether, esters, and hydrocarbons. Partition coefficient: Not Available Auto-ignition temperature: Not Available **Decomposition temperature:** Not Available Viscosity: Not Available

Section 10: STABILITY AND REACTIVITY

Reactivity: Not Available
Chemical stability: Stable under recommended storage conditions
Possibility of hazardous reactions: Hazardous polymerization may occur if contaminated with strong mineral acid.
Conditions to avoid: Extreme temperatures and direct sunlight
Incompatible materials: Contact with strong acid may result in volume expansion.
Hazardous decomposition products: None known based on information supplied.

Section 11: TOXICOLOGICAL INFORMATION

Single exposure (acute) studies indicate:

| Oral | Practically non-toxic to rats (LD50 22,400 mg/kg) | |
|------------------|---|--|
| Dermal | Practically non-toxic to rabbits (LD50 19,900 mg/kg) | |
| Inhalation | Exposure to concentrated vapors for 8 hrs produced no deaths in rats | |
| Eye irritation: | Slightly irritating to rabbits | |
| Skin irritation: | Slightly irritating to rabbits | |
| | No skin allergy was observed in guinea pigs following repeated exposure | |

Long-term dietary administration to rats produced increased mortality, reduced body weight gains, kidney and liver changes (enlarged, fatty infiltration of the liver), degeneration of the testes, and slight changes in the uterus. Life-time application to the skin of mice or life-time administration in the diet to rats did not increase the incidence of tumors. No effects were seen on the ability of male or female rats to reproduce of on the development of the offspring when exposed orally prior to mating. No genetic changes were observed in tests using bacteria and human or animal cells.

Section 12: ECOLOGICAL INFORMATION

Chemical Fate Information:

The non-acclimated and acclimated extent of bio-oxidation were 0% and 24%, respectively, after 20 days in fresh water. The measured chemical oxygen demand (COD) was determined to be 2.24 mg/mg. This material is not considered readily biodegradable in fresh water based on these data.

Section 13: DISPOSAL CONSIDERATIONS

Recover, reclaim or recycle when practical. Disposal via incineration is recommended. Appropriate pretreatment and disposal in an authorized landfill is acceptable. In all cases, dispose of material in accordance with all applicable federal, state and local laws and regulations. Consult appropriate regulatory officials or your attorney for information on such disposal.

Section 14: TRANSPORT INFORMATION

Not regulated as a hazardous substance the U.S. DOT.

Section 15: REGULATORY INFORMATION

TSCA: Listed on inventory

Canadian DSL: Listed on inventory

EU EINECS: Listed on inventory (EC# 232-391-0)

California's Proposition 65 Regulated Substance: Not listed

HAZARD CATEGORIES UNDER CRITERIA OF SARA TITLE III RULES (40 CFR PART 370)

| HEALTH | 0 |
|-------------|---|
| FIRE | 1 |
| INSTABILITY | 0 |

Section 16: OTHER INFORMATION

THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES. IN NO WAY SHALL CHEMCEED BE LIABLE FOR ANY CLAIMS, LOSSES, OR DAMAGES OF ANY THIRD PARTY OR FOR LOST PROFITS OR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, HOWSOEVER ARISING, EVEN IF CHEMCEED HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

> Safety Data Sheet Page 5 of 5