

Section 1: Identification

Product Identifier

Trade name : INNOLEIC™ ESO
Substance name : Epoxidized Soybean Oil
CAS-No. : 8013-07-9

Recommended use of the chemical and restrictions of use

Relevant identified uses : Plasticizer, Co-stabilizer

Relevant Identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Plasticizer and/or co-stabilizer for polyvinyl chloride resins; plasticizer for other polymers

Uses advised against : At this moment we have not identified any uses advised against

Details of the supplier of the safety data sheet

Supplier:

Company : Innoleics USA Corp
806 Verona Street, Suite 1
Kissimmee FL 34741 - USA
Telephone : +1 954 334 5807
E-mail address : contact@innoleics.com

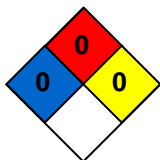
Emergency phone number

Emergency telephone number : +55 11 9 8380 6153

Section 2: Hazards identification

Classification of the substance or mixture

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification : Serious Eye Damage/Eye Irritation Category 2B

The product is not classified as dangerous according to Regulation EC No. 1272/2008.

The substance is not classified as dangerous according to Directive 67/548/EEC.

Label elements

Hazard pictogram(s) : Not Applicable

The product is not labeled as dangerous according to Regulation (EC) no. 1272/2008.

Handle in accordance with good industrial hygiene and safety practice.

Hazard statement(s)

None

Hazard(s) not otherwise classified

The product does not need to be labeled in accordance with EC directives or respective national laws.

Health injuries are not known or expected under normal use.

Precautionary statement(s) Prevention

P264 : Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

P305+P351+P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

Section 3: Composition/Information on ingredients

Substances

Substance name : Epoxidized soybean oil;
CAS No: : 8013-07-9
Composition : 100 wt.%
Synonyms: : ESO
Stabilizers : N/A
Hazard impurities : N/A

Product complies with RoHS (Restriction of Certain Hazardous Substances)

Section 4: First aid measures

Description of first aid measures

General advice : When symptoms persist or in all cases of doubt seek medical advice. Take off all contaminated clothing immediately. Wash contaminated clothing before re-use

Inhalation	:	Move out of dangerous area. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.
Skin contact	:	Wash with soap and plenty of water. In the event of irritation, call a physician.
Eye contact	:	Rinse immediately with plenty of water. If symptoms persist, call a physician.
Ingestion	:	Do NOT induce vomiting. Call a physician.

Most important symptoms and effects, both acute and delayed

See section 11

Indication of any immediate medical attention and special treatment needed

Treatment	:	Treat symptomatically. If possible, contact a physician and a toxicology center
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Section 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	:	Water spray, CO ₂ , Foam, Dry powder
Unsuitable extinguishing media	:	High volume water

Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	Fire may cause evolution of carbon oxides. Other toxic products cannot be excluded under specific fire conditions
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Special protective equipment and precautions for fire-fighters

Fire Fighting	<ul style="list-style-type: none">• Alert Fire Brigade and tell them location and nature of hazard.• Wear full body protective clothing with breathing apparatus.• Prevent, by any means available, spillage from entering drains or water course.• Use water delivered as a fine spray to control fire and cool adjacent area.• Avoid spraying water onto liquid pools.• DO NOT approach containers suspected to be hot.• Cool fire exposed containers with water spray from a protected location.• If safe to do so, remove containers from path of fire.
Fire/Explosion Hazard	<ul style="list-style-type: none">• Combustible.• Slight fire hazard when exposed to heat or flame.• Heating may cause expansion or decomposition leading to violent rupture of containers.• On combustion, may emit toxic fumes of carbon monoxide (CO).• May emit acrid smoke.

- Mists containing combustible materials may be explosive.
- Combustion products include:
 - carbon dioxide (CO₂)
 - other pyrolysis products typical of burning organic material.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : For large spillages, cleanup promptly by sweeping or vacuum. For small spillages, use absorbent materials. Keep in adequate containers for disposal.

Personal Protective Equipment advice is contained in Section 8 of the SDS

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling : Use forklifts or proper equipment to handle heavy containers. Use indicated personal protective equipment: safety goggles; nitrile or latex gloves; cotton clothing.

Hygiene measures : Avoid contact with skin and eyes. Do not breathe vapors or spray mists. Take off all contaminated clothing immediately.

Conditions for safe storage, including any incompatibilities

Requirement for storage areas and containers : Suitable materials for containers: carbon steel, stainless steel, aluminum, polypropylene, polyethylene, Teflon. Unsuitable materials for containers: natural rubber, butyl rubber, PVC (polyvinyl chloride)

Advice on protection against fire and explosion : The product is flammable but not readily ignited. Normal measures for preventive fire protection

Further information on storage conditions : Keep containers in a well ventilated place

Storage temperature : 10 – 40 °C

Section 8: Exposure controls/personal protection

Control parameters

Contains no substances with occupational exposure limit values

Emergency Limits : TEEL-1 - Not Available
TEEL-2 - Not Available
TEEL-3 - Not Available
Original IDLH - Not Available
Revised IDLH - Not Available

Exposure controls

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory Equipment
Hand protection : Use protective nitrile rubber or latex gloves
Eye protection : Use protective goggles
Skin and body protection : Long sleeve cotton shirts and pants, rubber or plastic boots

Environmental exposure controls

General advice : Prevent spreading over a wide area (physical containment and barriers. Product should not be allowed to enter drains, water courses or the soil

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Form : Liquid (20 °C)
Appearance : Transparent
Color : Clear – light yellow
Odor : mild, vegetable oils
pH : Aprox. 7
Specific Gravity : 0.991
Vapor pressure : negligible
Vapor density : No data available
Boiling point/boiling range : Decomposes before boiling.
Freezing point : <10 °C
Solubility in water : not soluble
Flash Point : >160° C
Viscosity (CS, 25 °C) : 320
% Oxirane : 6.8
Iodine number : 2.0
Acidity (mg KOH/gm) : 1.5

Other information

No further information available.

Section 10: Stability and reactivity

Reactivity

No information available

Chemical stability

This material is chemically stable under normal and anticipated storage, handling and processing conditions.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames, and sparks

Incompatible materials

A low energy release may result on contact with: strong acids, strong bases, Mineral acids and oxidizing agents

Hazardous decomposition products

Thermal decomposition giving flammable and toxic products: Carbon dioxide (CO₂), carbon monoxide, hazardous organic compounds.

Section 11: Toxicological information

Information on toxicological effects

Acute toxicity:	Product not classified as acute toxic by oral and dermic route. <ul style="list-style-type: none">• LD50 (oral, rat): > 5000 mg/kg• LD50 (dermal, rat): > 2000 mg/kg
Skin corrosion/irritation:	Prolonged exposure may cause skin irritation.
Serious eye damage/irritation:	Causes eye irritation with tearing and redness.
Respiratory or skin sensitization:	It is not expected that the product causes respiratory or skin sensitization.
Germ cell mutagenicity:	It is not expected that the product present reproductive cell mutagenicity.
Carcinogenicity:	It is not expected that the product present carcinogenicity.
Reproductive toxicity:	Product not classified as toxic to reproduction. Studies in experimental animals showed no reproductive effects.
Specific target organ toxicity – single exposure:	May cause respiratory irritation with coughing and sneezing

Specific target organ toxicity – repeated exposure: It is not expected that the product present specific target organ toxicity by repeated exposure.

Section 12: Ecological information

Toxicity

Adverse ecological impact is not known or expected under normal use.

NOEC(ECx), (Algae or aquatic plants, 72h): ≥ 100 mg/l

EC50 (Algae or aquatic plants, 72h): > 100 mg/l

LC50 (Fish, 96h): > 100 mg/l

EC50 (Custacea, 48h): > 100 mg/l

Persistence and biodegradability

Readily biodegradable

Bio-accumulative potential

Does not accumulate

Mobility in Soil

No data available

Other adverse effects

No data available

Section 13: Disposal considerations

Waste treatment methods

Product : Where possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.

Contaminated packaging : Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.

Section 14: Transport information

Not dangerous goods for ADR, RID, IMDG and ICAO/IATA

U.S. DOT Classification

Not regulated for transportation.

UN number

Not applicable

UN proper shipping name

Not applicable

Transport hazard class(es)

Not applicable

Packaging group

Not applicable

Environmental hazards

Not applicable

Special precautions for use

Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable

Section 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Not applicable

USA Federal Regulations

OSHA Status : There are no known hazardous components above regulatory thresholds in this product.

TSCA Status : All components of this product are listed on the TSCA Inventory

EPA CERCLA Hazardous Substances (40 CFR 302) : Not applicable

California Proposition 65 : Not applicable

SARA Title III Section 302 Extremely Hazardous Substance : Not applicable

SARA Title III Section 313 Toxic Chemicals: Not applicable

Canadian Regulations

National Pollutant Release Inventory (NPRI) : Not applicable

WHMIS Classification : Not controlled.

DSL : All components of this product are included on the Canadian Domestic Substances List (DSL).

National Inventories:

Australia AICS	:	Not determined
China IECS	:	Not listed
Europe EINECS	:	Not listed
Japan ENCS	:	Not determined
Korea KECI	:	Not listed
Philippines PICCS	:	Not determined

Section 16: Other Information

Shelf life	:	24 months when properly stored
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The data and information herein are merely complementary, supplied in good faith, and represent the best available information, not meaning that there was a thorough investigation in any of the subjects. No guarantee is given over the result of the application of these data and information, not exempting the users from their responsibility in any step of the products usage and handling. Any disposals of official regulatory agencies are prevailing over the data presented herein.