



SAFETY DATA SHEET
EPOXOL[®] 7-4 EPOXIDIZED SOYBEAN OIL

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| 1 | Product and Company Identification |
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Company

ACS Technical Products, Inc.
420 South Colfax Avenue
Griffith, Indiana 46319

Functional Additives

Customer Service Telephone Number: (219) 924-4370
(Monday through Friday, 8:00 AM to 4:30 PM Central)

Emergency Information

Transportation: CHEMTREC: (800) 424-9300
(24 hrs., 7 days a week)
Medical: Rocky Mountain Poison Center:
(866) 767-5089
(24 hrs., 7 days a week)

Product Information

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| PRODUCT NAME | EPOXOL [®] 7-4 Epoxidized Soybean Oil |
| SYNONYMS | Not available |
| MOLECULAR FORMULA: | Not available |
| CHEMICAL FAMILY: | Epoxidized vegetable oil |
| PRODUCT USE: | Plasticizer |

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| 2 | Hazards Identification |
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Emergency Overview

Color: yellow
Physical state: liquid
Form: viscous
Odor: slight, vegetable oils

Classification of the substance or mixture:

Not a hazardous substance or mixture.

GHS-Labeling

Not a hazardous substance or mixture.

Supplemental Information:

Potential Health Effects:

The product, in the form supplied, is not anticipated to produce significant adverse human health effects.

Other:

Handle in accordance with good industrial hygiene and safety practice.

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| 3 | Composition/Information on Ingredients |
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| Chemical Name | CAS-No. | Wt/Wt | GHS Classification |
|-------------------------|-----------|---------|--------------------|
| Soybean oil, epoxidized | 8013-07-8 | <=100 % | Not classified |

**Full text of the H-Statements mentioned in this Section, see Section 16.

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| 4 | First Aid Measures |
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Inhalation:

If inhaled, remove victim to fresh air.

Skin:

In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes, Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes:

Immediately flush eye(s) with plenty of water.

Ingestion:

If swallowed, DO NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

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| 5 | Fire Fighting Measures |
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Extinguishing media (suitable):

Water spray, Carbon dioxide (CO₂), Foam, Dry chemical

Protective equipment:

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand / NIOSH approved or equivalent).

Further firefighting advice:

Do not use a solid stream of water.

A solid stream of water can cause frothing and spattering.

Fire fighting equipment should be thoroughly decontaminated after use.

Fire and explosion hazards:

When product is burned, the following hazardous products of combustion can occur:

Carbon oxides

Hazardous organic compounds

Acrolein can be generated at and above 550° F.

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| 6 | Accidental Release Measures |
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In case of spill or leak:

Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Avoid generation of vapors. Contain and collect spillage with non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place into suitable properly labeled containers for prompt disposal. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

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| 7 | Handling and Storage |
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Handling

General information on handling:

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

Storage

General information on storage conditions:

This material is not hazardous under normal storage conditions. Material should be stored in closed containers in a secure area to prevent container damage and subsequent spillage.

Storage stability – Remarks:

Material is stable under normal conditions.

Storage incompatibility – General:

Store separate from:
Mineral acids
Strong acids

Temperature tolerance – Do not store above:

250 °F (121 °C)

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| 8 | Exposure Controls/Personal Protection |
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Airborne Exposure Guidelines:

Engineering controls:

Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

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Respiratory protection:

Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure or where exposure limit may be significantly exceeded, 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.

Skin protection:

Minimize skin contamination by following good industrial hygiene practice. Wearing protective gloves is recommended. Wash thoroughly after handling.

Eye protection:

Use good industrial practice to avoid eye contact.

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| 9 | Physical and Chemical Properties |
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| Color: | light yellow |
| Physical state: | liquid |
| Form: | viscous |
| Odor: | slight, vegetable oils |
| Flash point: | 590 °F (310 °C) (Cleveland open cup) |
| Auto-ignition temperature: | No data available |
| Lower flammable limit (LFL) | No data available |
| Upper flammable limit (UFL) | No data available |
| pH: | no data available |
| Density: | 0.993 g/cm ³ |
| Specific Gravity (Relative density): | 0.993 Water = 1 (liquid) |
| Vapor pressure: | <0.1 mm Hg (77 °F (25 °C)) |
| Vapor density: | no data available |
| Boiling point/boiling range: | Decomposes on heating. |
| Freezing point: | 32 °F (0 °C) |
| Evaporation rate: | No data available |
| Solubility in water: | 0.01 % |
| Oil/water partition coefficient: | No data available |
| Thermal decomposition: | No data available |
| Flammability: | See GHS Classification in Section 2 |

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| 10 | Stability and Reactivity |
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Stability:

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

Hazardous reactions:

Hazardous polymerization may occur.

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Materials to avoid:

Strong acids
Mineral acids
Contact with strong acid may result in volume expansion
Hazardous polymerization may occur if contaminated with strong mineral acids.

Conditions / hazards to avoid:

See HANDLING AND STORAGE - Section 7 of this SDS for specified conditions.
See Hazardous Decomposition Products below.

Hazardous decomposition products:

Thermal decomposition giving flammable and toxic products
Carbon oxides
Hazardous organic compounds
At high temperature:
Acrolein

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| 11 | Toxicological Information |
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Data on this material and/or similar material is summarized below.

Data for Soybean oil, epoxidized (8013-07-8)

Acute toxicity

Oral:

Practically nontoxic. (rat) LD50 >15,000 mg/kg.

Skin Irritation:

Non-irritating to slightly irritating. (rabbit) Irritation Index: 2.6 / 8.0 (24 h) (occluded exposure)

Eye Irritation:

Causes mild eye irritation. (rabbit) Irritation Index : 2.7 / 110

Dermal:

Practically nontoxic. (rabbit) LD50 > 19,900 mg/kg

Inhalation:

No deaths occurred. (rat) 8 h Exposure time (concentrated vapor)

Skin Sensitization:

Not a sensitizer. Repeated skin exposure. (guinea pig) No skin allergy was observed.

Other Information

The information presented is from representative materials in this chemical class. The results may vary depending on the test substance.

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Repeated dose toxicity

Repeated dietary administration to rat / affected organ(s): kidney, liver, testes, uterus / increased mortality (Repeated exposure at high concentration)

Carcinogenicity

Chronic oral administration to rat / signs: No increase in tumor incidence was reported.
Chronic dermal administration to mice / signs: No increase in tumor incidence was reported.

Genotoxicity

Assessment in Vitro:

No genetic changes were observed in laboratory tests using: bacteria, animal cells, human cells.

Developmental toxicity

Exposure during pregnancy. Oral (rat) / No birth defects were observed.

Reproductive effects

Reproduction Test. Oral (rat) / No toxicity to reproduction.

Other information

The information presented is from representative materials in this chemical class. The results may vary depending on the test substance.

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| 12 | Ecological Information |
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Chemical Fate and Pathway

Data on this material and / or a similar material are summarized below.

Data for Soybean oil, epoxidized (8013-07-8)

Octanol Water Partition Coefficient:

log Pow > 6.2

Biodegradation:

Readily biodegradable. (Modified Strum Test, 28 d) biodegradation 79% / OECD Test Guideline 301 B

Chemical Oxygen Demand:

COD 2,240 mg/g

Low potential to bioaccumulate

Additional Information:

Information given is based on data obtained from similar substances.

Ecotoxicology

Data on this material and / or similar material is summarized below.

Data for Soybean oil, epoxidized (8013-07-8)

Information given is based on data from similar substances.

Aquatic toxicity data:

Fish LC50 > limit of water solubility

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Algae:

Algae EC50 > limit of water solubility

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| 13 | Disposal Considerations |
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Waste disposal:

Recycling is preferred to disposal or incineration. If recycling is not an option, incinerate or dispose of in accordance with federal, state, and local regulations. Consult a regulatory specialist to determine appropriate state or local reporting requirements, and for assistance in waste characterization, hazardous waste disposal and other requirements listed in pertinent environmental permits.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. State and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

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| 14 | Transport Information |
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US Department of Transportation (DOT): not regulated

International Maritime Dangerous Goods Code (IMDG): not regulated

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| 15 | Regulatory Information |
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Chemical Inventory Status

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| EU. EINECS | EINECS | Conforms to |
| United States TSCA Inventory | TSCA | The components of this product are all on the TSCA Inventory |
| Australia. Inventory of Chemical Substances (AICS) | AICS | Conforms to |
| Canadian Domestic Substances List (DSL) | DSL | All components of this product are on the Canadian DSL |
| China Inventory of Existing Chemical Substances Inventory (IECSC) | IECSC (CN) | Conforms to |
| Japan ENCS – Existing and New Chemical Substances Inventory | ENCS (JP) | Conforms to |
| Japan ISHL – Inventory of Chemical Substances | ISHL (JP) | Conforms to |
| Korea Korean Existing Chemicals Inventory (KECI) | KECI (KR) | Conforms to |
| Philippines Inventory of Chemicals and Chemical Substances (PICCS) | PICCS(PH) | Conforms to |



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United States – Federal Regulations

SARA Title III – Section 302 Extremely Hazardous Chemicals:

The components in this product are either not SARA Section 302 regulated or regulated but present in negligible concentrations.

SARA Title III – Section 311/312 Hazard Categories

No SARA Hazards

SARA Title III – Section 313 Toxic Chemicals:

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – Reportable Quantity (RQ):

The components in this product are either not CERCLA regulated, regulated but present in negligible concentrations, or regulated with no assigned reportable quantity.

United States – State Regulations

New Jersey Right to Know

No components are subject to the New Jersey Right to Know Act.

Pennsylvania Right to Know

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|-------------------------|----------------|
| Soybean oil, epoxidized | 8013-07-8 |

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive defects.

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| 16 | Other Information |
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Latest Revision(s):

Date of Revision: 11/01/2015

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