

# MATERIAL SAFETY DATA SHEET

## SECTION I.

Manufacturers Name	OWENSBORO GRAIN EDIBLE OILS, INC.
Address	719 E. SECOND STREET
City, State Zip Code	OWENSBORO, KY 42302-1787
Phone No.	502-926-2032 Normal Business Hrs. 7 AM - 5 PM Mon-Fri,
Emergency Phone No.	502-686-6630 (24 Hr. Coverage)

Chemical Name:	Glycerol ester of fatty acids
Formula:	$H_5C_3(OOCR_x)_3$
Chemical Family:	Vegetable Oil or Triglyceride
Trade Name:	Soybean Salad Oil

## SECTION II. HAZARDOUS INGREDIENTS

INGREDIENTS (in mixture)	Percent	TLV UNITS
Soybean Salad Oil	100	Not Available; however $LC_{50}$ has been established as being >2.01 mg/liter

## SECTION III. PHYSICAL DATA

Boiling Point (°F)	640°F	Specific Gravity ( $H_2O = 1$ )	0.925
Vapor Pressure (mm Hg)	0.05 mm Hg @ 308°C	% Volatile (By volume)	0.03%
Vapor Density (Air = 1)	No difference from air at ambient temperature due to extremely low vapor pressure	Evaporation Rate ( $H_2O = 1$ )	Negligible at ambient temperature
Solubility in Water	Negligible	Appearance & Odor	Clear yellow liquid having a nearly bland aroma.

## SECTION IV. FIRE & EXPLOSION HAZARD DATA

Flash Point (Closed Cup Method)	630°F - 640°F	Hazard	Lower Limit	Upper Limit
Extinguishing Media:	CO <sub>2</sub> Extinguisher	Flammable Limits	690°F	700°F
		Explosive Limits	—	—

Special or Unusual Fire Fighting Procedures or Hazards:

## SECTION V. HEALTH HAZARD DATA

**Threshold Limit Values:** Not available; however  $LC_{50}$  has been determined to be greater than 2.01 mg/liter.

**Effects of Overdose or Overexposure:** This oil has  $LC_{50} > 30$  gm/Kg (in terms of oral toxicity) and is classified as non-toxic. This oil is not an eye irritant, nor a primary irritant, and is not a dermal toxicant.

**Emergency & First Aid Procedure:** None required on basis of test results.

## SECTION VI. REACTIVITY DATA

Stability	Stable	<input checked="" type="checkbox"/>	Conditions to Avoid: Exposure to heat, light, and pro-oxidants will accelerate oxidation leading to rancidity (off-flavor).
	Unstable	<input type="checkbox"/>	
Hazardous Polymerization	May Occur	<input type="checkbox"/>	Conditions to Avoid:
	Will Not Occur	<input checked="" type="checkbox"/>	

**Incompatibility (Materials to Avoid):** Hydrolyzation occurs in the presence of water causing an increase in free fatty acid content.

**Hazardous Decomposition Products:** Complete decomposition (in terms of oxidation products) would lead to the formation of various aldehydes and ketones.

## SECTION VII. SPILLS OR LEAKS PROCEDURES

**Steps to be taken in case of spill or leak:**

1. Correct situation that resulted in loss.
2. Notify proper company personnel if loss was extensive.
3. If loss will contaminate the environment, the EPA should be notified.

**Waste Disposal Method:**

Can be biologically and chemically degraded.

## SECTION VIII. SPECIAL PROTECTION & PRECAUTIONS

Ventilation	Local Exhaust		Special	
	Mechanical		Other	
Personal Protective Equipment	Eyes	None	Respirator (type)	None
	Gloves	None	Other	

**Precautions (Handling, Storage, Other):** Do not store in the presence of copper or copper alloys.

Material Safety Data Sheet  
May be used to comply with  
OSHA's Hazard Communication Standard,  
29 CFR 1910.1200. Standard must be  
consulted for specific requirements.

U.S. Department of Labor  
Occupational Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved  
OMB No. 1218-0072



IDENTITY (As Used on Label and List)

Soybean Oil

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

### Section I

Manufacturer's Name

Owensboro Grain Company, Inc.

Emergency Telephone Number

(502) 686-6523

Address (Number, Street, City, State, and ZIP Code)

719 East Second Street

Telephone Number for Information

(502) 926-2032

P.O. Box 1787

Date Prepared

Oct. 20, 1999

Owensboro, KY 42302

Signature of Preparer (optional)

Gary R. Krieger, MD/MPH/DABT

### Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Soybean Oil CAS # 800-122-7	OSHA 15mg/m <sup>3</sup>			100

### NEPA Hazard Classification

Health (Blue) 0

Flammability (Red) 1

Reactivity (Yellow) 0

### Section III — Physical/Chemical Characteristics

Boiling Point	Not Available	Specific Gravity (H <sub>2</sub> O = 1)	0.925 at 20° C
Vapor Pressure (mm Hg.)	Not Available	Melting Point	NA: Freezing Pt. -4° F = -20° C = 253° K
Vapor Density (AIR = 1)	Not Available	Evaporation Rate	(Butyl Acetate = 1) Less than 1

Solubility in Water:

Not Soluble; Liquid Surface Tension (Est.) 25 Dynes/cm at 20° C

Appearance and Odor

Pale Yellow to Brownish - Yellow Liquid

### Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	540° F (Closed Cup)	Flammable Limits	LEL	UEL
Extinguishing Media	Foam, Carbon Dioxide or Dry Chemical	Not Available	Not Available	Not Available

Special Fire Fighting Procedures

Class B Fire: Application of water to burning oil can cause spattering; oil will float on water.

Unusual Fire and Explosion Hazards

Explosion Hazards: None Possible risk of auto ignition/spontaneous combust under high temperature, closed conditions if material is absorbed on various

(Reproduce locally)

fiber matrices and oxygen is present. (e.g. oily rags)

OSHA 174, Sect. 1525

# Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid	Not Applicable
	Stable Yes			

Incompatibility (Materials to Avoid)

Hazardous Decomposition or Byproducts

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

# Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation?	Yes	Skin?	Yes	Ingestion?	Yes
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Health Hazards (Acute and Chronic)

Ingestion: None, material is a food.

Inhalation: Under mist conditions; no short-term inhalation limits.

Skin/Eye: Flush and rinse, particularly for eye contact; no significant skin reaction expected

Carcinogenicity:	No	NTP?	IARC Monographs?	OSHA Regulated?	expected
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Signs and Symptoms of Exposure

Not Applicable

Medical Conditions

Generally Aggravated by Exposure

Not Applicable

Emergency and First Aid Procedures

Eyes: Flush with water for at least 15 minutes.

# Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

No specific hazards; material is non-hazardous;

if in mist form and levels are above 15 mg/m<sup>3</sup>, a dust mask is advisable.

Waste Disposal Method

Review local regulations before cleaned-up materials are introduced into sewer systems or waste treatment systems.

Precautions to Be Taken in Handling and Storing

None

Other Precautions

Soiled rags or absorbent materials should not be kept under high temperature, closed conditions in the presence of oxygen.

# Section VIII — Control Measures

Respiratory Protection (Specify Type)

None—Unless Mist Conditions

Ventilation	Local Exhaust	Special	Not Applicable
	Under Extreme Mist Conditions Only		
	Mechanical (General)	Other	Not Applicable

Protective Gloves

Not Applicable

Eye Protection

Safety Glasses

Other Protective Clothing or Equipment

Not Applicable

Work/Hygienic Practices

Not Applicable