Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name

Distiller's Corn Oil

Synonyms

Corn Oil, N.F.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s)

Animal nutrition, biodiesel feed-stock

1.3 Details of the supplier of the safety data sheet

Manufacturer

Dakota Ethanol

46269 SD Highway 34 Wentworth, SD 57075 United States

www.dakotaethanol.com

Telephone (General) • (605) 483-2676

1.4 Emergency telephone number

Manufacturer

• 1-800-424-9300 - CHEMTREC

Section 2: Hazards Identification

UN GHS

According to Third Revised Edition

2.1 Classification of the substance or mixture

UN GHS

Skin Mild Irritation 3 - H316

2.2 Label elements

UN GHS

WARNING

Hazard statements

H316 - Causes mild skin irritation

Precautionary statements

Prevention • P280 - Wear protective gloves.

Response • P332+P313 - If skin irritation occurs: Get medical advice/attention.

Storage/Disposal • P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

2.3 Other hazards

UN GHS

 According to the Globally Harmonized System for Classification and Labeling (GHS) this product is considered hazardous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS

Not classified

2.2 Label elements

OSHA HCS

Not required.

2.3 Other hazards

OSHA HCS

 This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS

Uncontrolled

2.2 Label elements

WHMIS

Not required.

2.3 Other hazards

WHMIS

• In Canada, the product mentioned above is uncontrolled under the Workplace Hazardous Materials Information System (WHMIS).

2.4 Other information





See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

3.1 Substances

Hazardous Components					
Chemical Name	Identifiers	%(weight)	Classifications According to Regulation/Directive		Comments
Corn oil	CAS:8001-30-7 EINECS:232- 281-2	100%	Ingestion/Oral-Rat LD50 · >100 mL/kg	UN GHS: Skin Irrit 3	NDA

3.2 Mixtures

Material does not meet the criteria of a mixture according to United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

• IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin

IF ON SKIN: Wash with plenty of soap and water.

Eye

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

Ingestion

First aid is not expected to be necessary if material is used under ordinary conditions and as recommended.

4.2 Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

 Immediate medical attention after exposure to this material not expected to be necessary. No special treatment indicated related to exposure to this material.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media . Dry chemical powder, water spray, fog or foam.

Unsuitable Extinguishing

Water jet.

Media

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion

Hazards

Hazardous Combustion Products

Corn oil mist is combustible.

Carbon dioxide and possibly carbon monoxide.

5.3 Advice for firefighters

Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

• Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Spilled corn oil is very slippery. Avoid walking through spilled material and promptly clean up any spills.

Emergency Procedures

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Stay upwind. Keep unauthorized personnel away.

6.2 Environmental precautions

No special environmental precautions necessary. Avoid run off to waterways and sewers.

6.3 Methods and material for containment and cleaning up

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Containment/Clean-up Measures

Stop leak if you can do it without risk.
 Absorb or cover with dry earth, sand or other non -combustible material and transfer to containers.
 Wash spill area with detergent and water.

6.4 Reference to other sections

 Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

 Keep away from heat and ignition sources – No Smoking. Use good safety and industrial hygiene practices. Promptly clean up any spilled material. Do not use in areas without adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Storage

• Store in a cool, dry place. Keep away from heat and sources of ignition.

7.3 Specific end use(s)

• Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines				
Result Manufacturer				
Distiller's Corn Oil	TWAs	15 mg/m³ TWA , OSHA PEL (Total) 5 mg/m³ TWA , OSHA PEL (Resp) 10 mg/m³ TWA , NIOSH PEL (Total) 5 mg/m³ TWA , NIOSH PEL (Resp)		

8.2 Exposure controls

Engineering Measures/Controls

 Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Pictograms



Respiratory

Eye/Face

Skin/Body

• In case of insufficient ventilation, wear suitable respiratory equipment.

Wear protective eyewear (goggles, face shield, or safety glasses).

Wear appropriate gloves.

General Industrial Hygiene Considerations

Environmental Exposure Controls

- Do not get in eyes or on skin or clothing. Handle in accordance with good industrial hygiene and safety practice.
- Follow best practice for site management and disposal of waste.

Key to abbreviations

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

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Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Yellow, or reddish-yellow liquid with slight corn odor.
Color	Yellow, or reddish-yellow.	Odor	Slight corn.
Taste	No data available	Particulate Type	No data available
Particulate Size	No data available	Aerosol Type	No data available
Odor Threshold	No data available	Physical and Chemical Properties	No data available
General Properties	_		
Boiling Point	No data available	Melting Point	-14 C(6.8 F)
Decomposition Temperature	No data available	Heat of Decomposition	No data available
рН	No data available	Specific Gravity/Relative Density	0.918 Water=1
Density	No data available	Bulk Density	No data available
Water Solubility	Negligible	Solvent Solubility	No data available
Viscosity	No data available	Explosive Properties	No data available
Oxidizing Properties:	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	VOC (Wt.)	No data available
VOC (Vol.)	No data available	Volatiles (Wt.)	No data available
Volatiles (Vol.)	No data available		
Flammability			
Flash Point	254 C(489.2 F)	Flash Point Test Type	No data available
UEL	No data available	LEL	No data available
Autoignition	No data available	Self-Accelerating Decomposition Temperature (SADT)	No data available
Heat of Combustion (ΔHc)	No data available	Burning Time	No data available
Flame Duration	No data available	Flame Height	No data available
Flame Extension	No data available	Ignition Distance	No data available
Flammability (solid, gas)	No data available		
Environmental	-	•	
Half-Life	No data available	Octanol/Water Partition coefficient	No data available
Coefficient of water/oil distribution	No data available	Bioaccumulation Factor	No data available
Bioconcentration Factor	No data available	Biochemical Oxygen Demand BOD/BOD5	No data available
Chemical Oxygen Demand	No data available	Persistence	No data available
Degradation	No data available		

9.2 Other Information

No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Heat, sparks, open flame.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Not applicable.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data
Corn oil (100%)	9001 30 7	Acute Toxicity: orl-rat LD50:>100 mL/kg; orl-rat TDLo:18.36 mg/kg/4D-l; Irritation: skn-hmn 300 mg/3D-l MLD; Reproductive: orl-rat TDLo:390 mL/kg (2W pre-3D post); Tumorigen/Carcinogen: orl-rat TDLo:2600 mL/kg/2Y-l

GHS Properties	Classification	
Acute toxicity	UN GHS • Classification criteria not met	
Skin corrosion/Irritation	UN GHS • Skin Mild Irritation 3	
Serious eye damage/Irritation	UN GHS • Classification criteria not met	
Skin sensitization	UN GHS • Classification criteria not met	
Respiratory sensitization	UN GHS • Classification criteria not met	
Aspiration Hazard	UN GHS • Classification criteria not met	
Carcinogenicity	UN GHS • Classification criteria not met	
Germ Cell Mutagenicity	UN GHS • Classification criteria not met	
Toxicity for Reproduction	UN GHS • Classification criteria not met	
STOT-SE	UN GHS • Classification criteria not met	
STOT-RE	UN GHS • Classification criteria not met	

Potential Health Effects

Inhalation

Acute (Immediate)

Chronic (Delayed)

- Under normal conditions of use, no health effects are expected.
- No information on adverse effects in humans found.

Skin

Acute (Immediate)

Chronic (Delayed)

. Causes mild skin irritation.

• No information on adverse effects in humans found.

Eye

Acute (Immediate)

Chronic (Delayed)

• Under normal conditions of use, no health effects are expected.

No information on adverse effects in humans found.

Ingestion

Acute (Immediate)

Ingestion of large amounts of corn has been shown to have laxative effects.

Chronic (Delayed)• No information on adverse effects in humans found.

Section 12 - Ecological Information

12.1 Toxicity

Material data lacking.

12.2 Persistence and degradability

Material data lacking.

12.3 Bioaccumulative potential

Material data lacking.

12.4 Mobility in Soil

Material data lacking.

12.5 Results of PBT and vPvB assessment

Material data lacking.

12.6 Other adverse effects

Material data lacking.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

14.6 Special precautions for user

None known.

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

Not relevant.

Code

Section 15 - Regulatory Information

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

SARA Hazard Classifications . None

State Right To Know				
Component CAS MA NJ PA				
Corn oil	8001-30-7	No	No	Yes

Inventory				
Component CAS Canada DSL Canada NDSL TSCA				
Corn oil	8001-30-7	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Corn oil 8001-30-7 100% Uncontrolled product according to WHMIS classification criteria

Canada - WHMIS - Ingredient Disclosure List

• Corn oil 8001-30-7 100% Not Listed

Environment

Canada - CEPA - Priority Substances List

• Corn oil 8001-30-7 100% Not Listed

Mexico

Other

Mexico - Hazard Classifications

• Corn oil 8001-30-7 100% Not Listed

Mexico - Regulated Substances

• Corn oil 8001-30-7 100% Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Corn oil 8001-30-7 100% Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Corn oil 8001-30-7 100% Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Corn oil 8001-30-7 100% Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Corn oil 8001-30-7 100% Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Corn oil 8001-30-7 100% Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Corn oil 8001-30-7 100% Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Corn oil 8001-30-7 100% Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Corn oil 8001-30-7 100% Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

Corn oil 8001-30-7 100% Not Listed

United States - California

Environment-

U.S. - California - Proposition 65 - Carcinogens List

• Corn oil 8001-30-7 100% Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Corn oil 8001-30-7 100% Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Corn oil 8001-30-7 100% Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Corn oil 8001-30-7 100% Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Corn oil 8001-30-7 100% Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Corn oil 8001-30-7 100% Not Listed

United States - Pennsylvania

-Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• Corn oil 8001-30-7 100% Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

Corn oil 8001-30-7 100% Not Listed

United States - Rhode Island

Labor

U.S. - Rhode Island - Hazardous Substance List

• Corn oil 8001-30-7 100% Flammable

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

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Section 16 - Other Information

Last Revision Date 25/March/2021 • Preparation Date 21/February/2012 •

Disclaimer/Statement of Liability

• The information contained herein is believed to be accurate. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.

Key to abbreviations NDA = No Data Available