

Safety Data Sheet

Section 1: Identification

Product identifier

Product Name Distiller's Corn Oil

Synonyms Corn Oil, N.F.

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

Relevant identified use(s) Animal nutrition, biodiesel, feed-stock

Details of the supplier of the safety data sheet

Manufacturer *Cardinal Ethanol*

1554 N 600E

Union City, Indiana 47390

Telephone (General) 765-964-3137

Emergency telephone number

Manufacturer 765-964-3137

Section 2: Hazards Identification

Classification of the substance or mixture

Skin Mild Irritation 3 - H316

Causes Eye irritation 3 – H320

Hazardous to the aquatic environment Acute 3 - H402

Hazardous to the aquatic environment Chronic 3 - H413

Label elements

Warning

Hazard statements

H316 - Causes skin mild irritation.

H320 - Causes eye irritation.

H402 - Harmful to aquatic life.

H412 - May cause long lasting harmful effects to aquatic life

Precautionary statements

Prevention

P264 - Wash thoroughly after handling.

P273 - Avoid release to the environment.

Response

P332+P313 – If skin irritation occurs: Get medical advice/attention.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention. P321 - Specific treatment, see supplemental first aid information. P308+P313 - IF exposed or concerned: Get medical advice/attention.

Storage/Disposal

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

Other hazards

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

Section 3 - Composition/Information on Ingredients

Substances

Hazardous Components					
Chemical Name	Identifiers	% (weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Corn Oil	CAS: 8001-30-7 EINECS: 232-381-2	100%	Ingestion/Oral-Rat LD50 • >100 mL/kg	UN GHS: Skin Irrit 3	NDA

Mixtures

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

Section 4 - First Aid Measures

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.

Most important symptoms/effects

Refer to Section 11 – Toxicological information

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

Extinguishing media

Suitable Extinguishing Media

Dry chemical powder, water spray, fog or foam.

Unsuitable Extinguishing Media

Do not use a solid water stream (Jet) as it may scatter and spread fire.

Unusual Fire and Explosion Hazards

Corn oil mist is combustible.

Hazardous Combustion Products

Carbon dioxide and possibly carbon monoxide.

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

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. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. Stay upwind. Keep unauthorized personnel away.

Environmental precautions

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

Methods and material for containment and cleaning up

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.

Section 7 - Handling and Storage

Precautions for safe 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. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Keep away from heat and sources of ignition. Keep out of the reach of children.

Section 8 - Exposure Controls/Personal Protection

Control parameters

No special control parameters identified.

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

In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face

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

Hands

Wear appropriate gloves.

Skin/Body

Wear protective clothing.

General Industrial Hygiene Considerations

Do not get in eyes or on skin or clothing. Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls

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

Section 9 - Physical and Chemical Properties

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
pH	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 (ΔH_c)	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			
HalfLife	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		

Other Information

No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Conditions to avoid

Heat, sparks, open flame.

Incompatible materials

Avoid contact with oxidizers.

Hazardous decomposition products

Not applicable.

Section 11 - Toxicological Information

Information on toxicological effects

Component Name	CAS	Data
Corn Oil (100%)	8001-30-7	Acute Toxicity: orl-rat LD50:>100 mL/kg; orl-rat TDLo:18.36 mg/kg/4D-I; Irritation: skn-hmn 300 mg/3D-I MLD; Reproductive: orl-rat TDLo:390 mL/kg (2W pre-3D post); Tumorigen/Carcinogen: orl-rat TDLo:2600 mL/kg/2Y-I

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)	Under normal conditions of use, no health effects are expected.
Chronic (Delayed)	No information on adverse effects in humans found.

Skin

Acute (Immediate)	Causes mild skin irritation.
Chronic (Delayed)	No information on adverse effects in humans found.

Eye

Acute (Immediate)	Under normal conditions of use, no health effects are expected. May causes mild eye irritation.
Chronic (Delayed)	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

Toxicity

Material data lacking.

Persistence and degradability

Material data lacking.

Bioaccumulative potential

Material data lacking.

Mobility in Soil

Material data lacking.

Results of PBT and vPvB assessment

Material data lacking.

Other adverse effects

Material data lacking.

Section 13 - Disposal Considerations

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

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

Special precautions for user

None known.

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

Not relevant.

Section 15 - Regulatory Information

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

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 Uncontrolled product according to WHMIS classification criteria

Canada – WHMIS – Ingredient Disclosure List

Corn Oil 8001-30-7 Not Listed

Environment

Canada CEPA – Priority Substances List

Corn Oil 8001-30-7 Not Listed

Mexico

Other

Mexico – Hazard Classifications

Corn Oil 8001-30-7 Not Listed

Mexico – Regulated substances

Corn Oil 8001-30-7 Not Listed

United States

Labor

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

Corn Oil 8001-30-7 Not Listed

U.S. – OSHA – Specifically Regulated Chemicals

Corn Oil 8001-30-7 Not Listed

Environment

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

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

United States – California

Environment

U.S. - California - Proposition 65 Carcinogens List

Corn Oil 8001-30-7 Not Listed

U.S. - California - Proposition 65 Developmental Toxicity

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

United States – Pennsylvania

Labor

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

Corn Oil 8001-30-7 Not Listed

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

Corn Oil 8001-30-7 Not Listed

United States - Rhode Island

Labor

Corn Oil 8001-30-7 Flammable

Chemical Safety Assessment

No Chemical Safety Assessment has been carried out

Section 16 - Other Information

Preparation Date 16/December/2018

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Key to abbreviations

NDA = No Data Available