

Safety Sheet Data

Transport Symbol WHMIS NFPA Personal Protective Equipment

Not controlled

Not controlled

Revision Number: 1.0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Name:

Castor Oil

Use of the Substance / Preparation:

Food Ingredient Animal Feed Industrial use

2. HAZARDS IDENTIFICATION

Emergency Overview

Spontaneous combustion (fire) may result from oil soaked materials such as rags, steel wool, paper, and clothing. Place soaked materials in a sealed, metal container to prevent this. The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance Physical State Odor Yellow to Clear Liquid Bland

This product is NOT classified as hazardous according to 29 CFR 1910, amended to conform to the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (OSHA / GHS); SOR/88-66, the Canadian Controlled Products Regulations (CPR); and/or NOM-002-SCT-2003 (Mexico). However, vegetable oil (in mist form) is known to be listed as an OSHA 29 CFR 1910.1000 Air Contaminant. Occupational exposure limits are subsequently provided in section 8 of this SDS.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family

Oil

Non-hazardous Components

Chemical Name	CAS-No	Weight %	North American Hazard Indicator		
Castor Oil	8001-79-4	99-100	None Known		

4. FIRST AID MEASURES

Description of first aid measures

General Advice No hazards which require special first aid measures. When symptoms persist or in all cases of doubt seek medical advice.

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin Contact Wash off with warm water and soap.

Inhalation Move to fresh air.

Ingestion No special measures required. Health injuries are not known or expected under normal use.

Most important symptoms and affects, both acute and delayed

Eyes Not expected to pose health issues for the eye.

Skin Prolonged or excessive contact with skin may result in mild irritation, however, significant health injuries are not expected under normal use.

Inhalation Health injuries are not known or expected under normal use. When in the form of an airborne mist, refer to section 8 of this sheet for exposure limits pertaining to "vegetable oil mist". Excessive inhalation of mist may result in respiratory irritation. Ingestion Health injuries are not known or expected under normal use. Overexposure may cause: Gastrointestinal disturbance.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties

Material may pose fire hazard because it is dispersed (or spread) by water.

Extinguishing media

Suitable Extinguishing Media Dry chemical. Dry chemical powder. Carbon dioxide (CO2). Foam. Sand. Fog. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture

Hazardous Combustion Products Thermal decomposition can lead to release of irritating gases and vapors, Acrolein, Carbon

monoxide (CO), Carbon dioxide (CO2), Smoke, Fumes.

Specific Hazards Arising from the Risk of ignition. Rags and other materials containing this product may heat and

Chemical

spontaneously ignite, if exposed to air. Store wiping rags and similar materials in metal cans with tightly fitting lids. Cool closed containers exposed to fire with water spray.

Sensitivity to mechanical impact Sensitivity to static discharge

No information available. No information available.

Advice for fire-fighters

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health 0 Flammability 1 Stability and Reactivity 0 Physical hazard None known



ACCIDENTAL RELEASE MEASURES

Personal Precautions

Avoid high pressure washing or generation of aerosols. Material can create slippery conditions.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not allow product to reach soil, sewage system or any water course.

Methods for Clean-up

Dam up. Soak up with inert absorbent material. Use dry spill kit material or sand, collect in appropriate containers. For disposal information see section 13. Clean contaminated surface thoroughly.

Other Information

Oil soaked materials may spontaneously combust

7. HANDLING AND STORAGE

Handling

Ensure adequate ventilation. Do not use pressure to empty drums. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Keep in a cool sheltered place. To maintain product quality, do not store in heat or direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

As an airborne mist containing vegetable oil, exposure limits pertaining to "vegetable oil mist" have been provided below

Chemical Name ACGIH TLV		OSHA PEL	MEXICO	NIOSH	
vegetable oil mist	TVL: 10 mg/m(3)	TWA: 5 mg/m ³ mist, respirable fraction TWA: 15 mg/m ³ mist, total	TWA: 10 mg/m³ except irritant oils	TWA: 10 mg/m³ total mist TWA: 5 mg/m³ respirable mist	

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Apply technical measures to

comply with the occupational exposure limits.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

Personal Protective Equipment

Eye/face Protection.

If exposed to airborne mist, or if splashing is possible, appropriate safety glasses with

side-shields or safety goggles are recommended.

Skin and Body Protection

Oil resistant gloves are recommended. Appropriate body protection should be selected based on activity and possible exposure. Also take into consideration the specific local

conditions under which the product is used.

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection.







9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance **Physical State**

Odor

Odor Threshold

pH

Yellow to Clear

Liquid Bland

Not applicable Not applicable

Flash Point

Autoignition Temperature Boiling point

Melting/Freezing Point Decomposition temperature

Oxidizing Properties

Greater than 232 °C Not auto-flammable

Not applicable

Not applicable No information available

Not expected to be oxidizing

Water Solubility

Solubility(ies)

Evaporation Rate Vapor Pressure Vapor Density

Specific Gravity / Relative Density

Partition Coefficient (n-octanol/water)

Insoluble

Soluble in many organic solvents

No information available No information available No information available Approx. 0.9 (H2O=1) No information available

10. STABILITY AND REACTIVITY

Stability Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials No materials to be especially mentioned.

Hazardous Decomposition Products Thermal decomposition leads to formation of acrolein, Carbon monoxide (CO), Carbon dioxide (CO₂), Smoke, Fumes.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity	Based on available data, no evidence of acute toxicity.				
Skin corrosion/irritation	Based on available data, not, or only slightly irritating.				
Serious eye damage/eye irritation	Based on available data, no evidence of serious eye damage / irritation.				
Respiratory or skin sensitisation	Based on available data, not expected to be a skin or respiratory sensitiser.				
Germ cell mutagenicity	Based on available data, the classification criteria are not met.				
Carcinogenicity	Based on available data, no evidence of carcinogenicity.				
Reproductive toxicity	Based on available data, no evidence of reproductive toxicity				
STOT - single exposure	Based on available data, the classification criteria are not met.				
STOT - repeated exposure	Based on available data, the classification criteria are not met.				
Aspiration hazard	Based on available data, no known aspiration hazard.				

Potential health effects

Eyes Not expected to pose health issues for the eye.

Skin Prolonged or excessive contact with skin may result in mild irritation, however, significant

health injuries are not expected under normal use.

Inhalation Health injuries are not known or expected under normal use. When in the form of an

airborne mist, refer to section 8 of this sheet for exposure limits pertaining to "vegetable oil

mist". Excessive inhalation of mist may result in respiratory irritation.

Ingestion Health injuries are not known or expected under normal use. Overexposure may cause:

Gastrointestinal disturbance.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Not classified for aquatic toxicity.

Persistence/Degradability

Mobility

Readily biodegradable.

The product is insoluble and floats on water.

13. DISPOSAL CONSIDERATIONS

Whenever possible, as rules and regulations allow, please recycle or manage materials to minimize waste.

Waste Disposal Methods Dispose of in compliance with the laws and regulations pertaining to this product in your

jurisdiction. Oil soaked materials may spontaneously combust and should be properly managed to avoid ignition and heat sources or oxygen rich environments. Collect and store

soaked materials in closed, metal containers to help prevent combustion.

Contaminated Packaging Empty containers should be decontaminated and taken for local recycling, recovery or

waste disposal.

14. TRANSPORT INFORMATION

Domestic transport regulations (USA)

DOT Not regulated

Domestic transport regulations (Canada)

TDG Not regulated

Domestic transport regulations (Mexico)

MEX Not regulated

International transport regulations

ICAO Not regulated IATA Not regulated IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

The components of this product are reported in the following inventories:

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	AICS	ENCS	CHINA	PICCS	KECL	NZIoC
Castor Oil	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes

USA

Federal Regulations

Ozone Depleting Substances:

No Class I or Class II material is known to be used in the manufacture of, or contained in, this product.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 372.

CERCLA/SARA 103-302

Sections 103-302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 103-302.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 63)

This product is not known to contain any HAPS.

State Regulations

California Proposition 65

Proposition 65 chemicals are not expected to be found in this product above those naturally present in their agricultural source. Proposition 65 exempts naturally occurring listed chemicals from an obligation to label.

State Right-to-Know

Component Information.

Chemical Name	Weight %	Massachusetts	Minnesota	New Jersey	Pennsylvania
Castor Oil	99-100	No	No	No	Yes

Canada

WHMIS Product Classification

Not a WHMIS controlled product.

WHMIS Ingredient Disclosure List IDL

No known component is listed on the WHMIS ingredients disclosure list.

(NPRI) Canadian National Pollutant Release Inventory

No known component is listed on NPRI.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Mexico

Mexico - Grade

Slight risk, Grade 1

16. OTHER INFORMATION

Reason for revision:

New SDS format. This version replaces all previous versions.

Abbreviations and acronyms

ACGIH TLV - American Conference of Governmental Industrial Hygienists Threshold Limit Values

AICS - Australian Inventory of Chemical Substances (Australia)

CAS - Chemical Abstract Service

CHINA - Chinese Inventory of Existing Chemical Substances (China)

DOT - U.S. Department of Transportation

DSL - Domestic Substance List (Canada)

EINECS - European Inventory of Existing Commercial Chemical Substances (EU)

ELINCS - European List of Notified Chemical Substances (EU)

ENCS - Existing and New Chemical Substances (Japan) / ISHL - Industrial Health and Safety Law (Japan)

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

IATA - International Air Transport Association Dangerous Goods Regulations

ICL - In Commerce List (Canada)

IMDG - International Maritime Dangerous Goods Code

IMO - International Maritime Organization

KECL - Korean Existing and Evaluated Chemical Substances (Korea)

LC50 - Lethal concentration that produces fatalities in 50% of a given test population

LD50 - Median lethal dose of a given test population

MEX - NOM-002-SCT/2003 List of Hazardous Substances and Materials Most Commonly Transported

MEXICO - Mexico Occupational Exposure Limits

NDSL - Non Domestic Substances List (Canada)

NFPA - National Fire Protection Association

NIOSH - National Institute of Occupational Safety and Health

NZIoC - New Zealand Inventory of Chemicals (New Zealand)

OSHA - Occupational Safety & Health Administration

OSHA PEL - Occupational Safety and Health Administration Permissible Exposure Limits

PICCS - Inventory of Chemicals and Chemical Substances (Philippines)

STOT - Specific Target Organ Toxicity

TDG - Transportation of Dangerous Goods (Transport Canada)

TSCA - Toxic Substances Control Act, Section 8(b) Inventory (USA)

TWA - Time Weighted Average: Average concentration that should not be exceeded during a work day (usually 8-hours)

WHMIS - Workplace Hazardous Materials Information System

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.



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