MATERIAL SAFETY DATA SHEET

SECTION: 1.1 PRODUCT IDENTIFICATION

Product Name:	**Castor USP Carrier Oil**
Botanical Name:	*Ricinus communis*
Synonyms:	*Recinus communis*
INCI Name:	Ricinus communis (castor) seed oil
CAS #:	8001-79-4
County of Origin:	India

SECTION: 1.2 COMPANY IDENTIFICATION

Company:	**WFMED**
Address:	8245 Backlick Road, Unit D, Lorton VA 22079 USA
Telephone No:	703-339-5388
FAX:	703-339-1999

24 HOUR EMERGENCY TELEPHONE NUMBER: (613)-996-6666 CANUTEC

SECTION: 2. COMPOSITION / INFORMATION INGREDIENTS

Main Constituents	Palmitic, palmitoleic, margaric, margaroleic, stearic, dioxystearic, oleic, ricinoleic, linoleic, a-linolenic, arachidic, eicosanic, behenic and erucic acids.	
Composition	Ricinoleic Acid: 80 – 91%	Palmitic Acid: 1 – 2%
	Linoleic Acid: 5 – 7%	Oleic Acid: 3 – 7%

SECTION: 3. HAZARDS IDENTIFICATION

This material is a vegetable oil. The manufacturer does not anticipate any harmful effects from this product providing good manufacturing practices are followed.

SECTION: 4. FIRST AID MEASURES

Eye Contact:	Irrigate with water immediately, continue flushing eyes with water for 15 minutes. Seek medical attention if irritation persists.
Inhalation:	Remove to fresh air.
Ingestion:	Rinse mouth with water and consult a physician immediately. Do not induce vomiting. Never-give anything by mouth if victim is unconscious, is rapidly-losing or is Convulsing.
Skin Contact:	Skin contact does not produce irritation, or itching of the skin. Remove contaminated clothing Wash with soap and plenty of water.

SECTION: 5. FIRE FIGHTING MEASURES

Flash Point:	229 °C (Closed Cup)
Extinguishing media:	Carbon Dioxide, dry chemical or foam. Closed containers may build up pressure at elevated temperature
Special Procedures:	Determine the need to evacuate or isolate the area according to your local emergency plan.
Firefighting Hazards:	None identified.
Combustion Product:	Carbon Monoxide, Carbon Dioxide

SECTION: 6. ACCIDENTAL RELEASE MEASURES

Safety Precautions:	Eliminate all ignition sources. Ventilate area. Determine the need to evacuate or isolate the area according to your local emergency plan.
Environmental Precautions:	Keep away from drains, surface and ground water. Report spills to

	appropriate Authorities if required.
Methods For Cleaning Up:	Contain and collect with inert absorbent material and place in suitable container for disposal. Comply with all federal, state, and local regulation. Wipe small spills with cloth. Clean with hot water and detergent.

SECTION: 7. HANDLING AND STORAGE

Handling:	Good personal hygiene practices should be used. Contaminated clothing and shoes should be cleaned before re-use.
Storage:	Store in a cool, dry, well ventilated place protected from light. Keep away from extreme heat and away from all sources of ignition

SECTION: 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Eyes Protection:	The use of safety glasses is recommended.
Respiratory Protection:	In well- ventilated areas, respiratory protection is not normally required.
Protective Equipment:	An eyewash fountain and / or safety shower should be available in the work area. Acceptable industrial hygiene practices should be maintained.

SECTION: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pale yellow to golden yellow liquid
Odor:	Characteristic faint odor
Solubility:	Soluble in alcohol. Insoluble in water.
Relative Density:	0.957 – 0.965 @ 25°C
Boiling Point	313 °C
Refractive Index:	1.476 – 1.479 @ 25°C
Free Fatty Acids:	0.75 % Max
Unsaponifiable matters:	<0.7 % Max
Saponification Value:	176 – 182
Iodine Value:	83 – 88
Extraction Method:	Cold-pressed of the seeds/kernels.

SECTION: 10. STABILITY AND REACTIVITY

Stability:	Chemically stable. This material presents no significant reactivity hazard.
Conditions to Avoid:	Avoid sparks, flame and excessive heat.
Materials to Avoid:	Strong oxidizing agents.
Flammability:	Combustible liquid.
Hazardous Polymerization:	Will not occur.
Hazardous Combustion or	None known.

SECTION: 11. TOXICOLOGICAL INFORMATION

Inhalation:	Inhalation of high concentrations of hot vapor may result in irritation of eyes, nose and throat, headache, nausea, and dizziness.
Skin Contact:	Repeated or prolonged contact can cause redness, irritation and scaling of skin.
Eye Contact:	May irritate eyes.
Ingestion:	Low order toxicity causing irritation of the stomach and intestines which results in nausea and vomiting.
Medical Conditions Aggravated by Exposure:	May aggravate dermatitis, psoriasis and other skin conditions.

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Chronic Toxicity: May cause allergic reactions on skin
Carcinogenicity Data: None of the components of this material are listed as a carcinogen.
Reproductive Toxicity: No adverse effects on reproduction are known.
Acute Toxicity Values: No data is currently available.

SECTION: 12. ECOLOGICAL INFORMATION

Avoid any pollution of ground, surface or underground water.

SECTION: 13. DISPOSAL CONSIDERATION

Incineration or sanitary landfill in accordance with local, provincial and federal regulations. Check with disposal expert to insure compliance

SECTION: 14. TRANSPORT INFORMATION

US DOT Shipping Check appropriate authority
IATA Shipping (Air): Check appropriate authority
IMDG Shipping Check appropriate authority

SECTION: 15. REGULATORY INFORMATION

WHMIS (Canada): Not controlled under WHIMS (Canada)
HMIS (USA): Health Hazard – 0 Fire Hazard – 1 Reactivity – 0
DSCL (ECC) This product is not classified according to EU regulations

SECTION: 16. OTHER INFORMATION

Revision Date: Jan 2, 2013

SECTION: 17. DISCLAIMER

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CERTIFICATE OF ANALYSIS

Product:	**Castor USP Carrier Oil**
Product Lot No:	15006-B75
Best Before:	June, 2017

Properties	**Specifications:**	**Results:**
Appearance:	Pale yellow to golden yellow liquid	Complies
Odor:	Characteristic odor	Complies
Solubility:	Soluble in alcohol and oils. Insoluble in water.	Complies
Specific Gravity	0.957 – 0.965 @ 25°C	0.958
Refractive Index:	1.480 – 1.650 @ 25°C	Complies
Free Fatty Acids:	0.75% Max	Complies
Saponification Value:	176 – 182	180
Iodine Value:	83 – 88	87
Hydroxyl Value:	160 - 168	163

DISCLAIMER:

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