

MATERIAL SAFETY DATA SHEET

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No. 476

RAW LINSEED OIL

Date November 1981

SECTION I. MATERIAL IDENTIFICATION			
<p>MATERIAL NAME: RAW LINSEED OIL DESCRIPTION: A drying oil; as obtained from flaxseed, it is a mixture of the esters of glycerol with fatty acids. OTHER DESIGNATIONS: Flaxseed Oil, ASTM D234, GE Material D5A12, CAS# 008 001 261 MANUFACTURER: Available from several suppliers, including: Textron, Inc., Spencer Kellogg Div. 120 Delaware Ave., Buffalo, NY 14240 Phone: (716) 852-5850</p>			
SECTION II. INGREDIENTS AND HAZARDS	%	HAZARD DATA	
<p>Linseed Oil <u>Fatty Acid Content of Esters (typical)</u> Oleic ----- 17% Linoleic --- 14 Linolenic--- 60 Palmitic---- 6 Stearic ---- 3</p> <p style="margin-left: 100px;">} Cowan, J.C., "Chemistry and Technology of Drying Oils" in Applied Polymer Science, Craver and Tess (ed), Organic Coatings & Plastics Div., ACS, Washington D.C., 1975, pp 512-529</p> <p>*ACGIH (1981) TLV for Nuisance Particulate, vegetable oil mist.</p>	<p>ca 100</p>	<p>8-hr TWA 10 mg/m³* (as mist)</p> <p>Human, Skin 300 mg/3D-I moderate irritation</p>	
SECTION III. PHYSICAL DATA			
<p>Boiling point at 1 atm, deg C ----- >340 Melting point, deg C ----- -19 Solubility in water ----- insoluble</p>	<p>Specific gravity, 25/25 C ----- ca 0.93 Viscosity at 25 C, cSt ----- ca 50 Iodine value** ----- >170</p>	<p>Appearance and Odor: Golden yellow, amber or brownish oil with a characteristic odor.</p> <p>**Iodine value of "drying oils" is >130.</p>	
SECTION IV. FIRE AND EXPLOSION DATA		LOWER	UPPER
Flash Point and Method	Autoignition Temp.	Flammability Limits In Air	
432 F (CC)†	650 F		
<p>Extinguishing Media: Dry chemical, carbon dioxide, foam, water spray. A water spray can be used to cool fire-exposed containers to prevent pressure rupture. Water or foam may cause frothing if directed into container of burning liquid. Linseed oil is an OSHA Class IIIB combustible liquid. Firefighters should wear self-contained breathing apparatus. †If solvent extraction has been used to isolate oil, residual solvent may give a lower flash point.</p>			
SECTION V. REACTIVITY DATA			
<p>This material is stable in closed containers at room temperature under normal storage and handling conditions. Raw linseed oil will polymerize on exposure to air. It reacts with oxygen from air at room temperature. This autooxidation can lead to a possible hazard of spontaneous combustion if heat generated is retained. For example, oily rags or paper products can produce spontaneous combustion fires. Linseed oil is incompatible with oxidizing agents. It reacts violently with chlorine. Thermal-oxidative degradation may yield carbon monoxide and acrolein (when heated >500 F).</p>			

SECTION VI. HEALTH HAZARD INFORMATION	TLV10 mg/m ³ (oil mist) (See Sect II)
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Avoid excessive inhalation of oil mist or of fume generated on heating. Linseed oil is a nontoxic vegetable oil.

Prolonged or repeated skin contact with oil can be irritating. Sensitization and/or dermatitis can develop upon repeated or prolonged contact for certain individuals. Practice good personal hygiene to minimize skin contact.

Aspiration or inhalation into the lungs could cause chemical pneumonitis.

FIRST AID:
Eye Contact: Flush thoroughly with running water for 15 min. including under eyelids.
Skin Contact: Remove contaminated clothing. Wash affected area with soap and water.
Inhalation: Remove to fresh air.

SECTION VII. SPILL, LEAK, AND DISPOSAL PROCEDURES

Notify safety personnel of leaks or spills. Remove sources of heat or ignition. Provide adequate ventilation. Contain spill and scoop up for recovery or disposal or absorb small spills and residues with vermiculite or other suitable absorbent materials. Place absorbed material into a covered metal container for disposal; addition of water to container may also be desirable.

DISPOSAL: Treat as a combustible material. Liquid wastes can be incinerated or disposed of via a licensed waste disposal company. Solid-absorbed waste can be burned or deposited in an approved sanitary landfill.

Follow Federal, State, and Local regulations.

SECTION VIII. SPECIAL PROTECTION INFORMATION

Provide adequate general ventilation in areas of use or storage. Local exhaust ventilation may be needed when material is heated.

Wear chemical safety goggles or safety glasses with side shield where liquid contact with the eyes is possible due to splashing. Neoprene rubber gloves are recommended when handling this material to minimize skin contact.

Eyewash stations and washing facilities should be accessible in areas of use.

SECTION IX. SPECIAL PRECAUTIONS AND COMMENTS

Store in closed containers in a cool, dry, well-ventilated area away from sources of heat and ignition. Protect containers from physical damage. Residues remaining in emptied containers can present a fire hazard. Do not cut, puncture or weld on or near these drums or containers.

Contaminated rags or paper products can cause spontaneous combustion upon improper storage.

DATA SOURCE(S) CODE: 1,4-7, 14,43,49

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APPROVALS: MIS CRD	<i>J.M. [Signature]</i>
Industrial Hygiene and Safety	<i>[Signature]</i> 10-29-81
MEDICAL REVIEW: 14 November 1981	