



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

221 Rochester Street
Avon, New York 14414-9409
(585) 226-6177

MSDS No.: OX0010
Effective Date: January 4, 2007

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	Oleic Acid
Chemical Synonyms	Red Oil, cis-9-Octadecanoic Acid
Formula	CH ₃ (CH ₂) ₇ CH:CH(CH ₂) ₇ COOH
Unit Size	up to 45 Kg
C.A.S. No.	112-80-1



CHEMTREC
800-424-9300
Day 585-226-6177

Health	1
Fire	1
Reactivity	0

NFPA

HAZARD RATING				
MINIMAL	SLIGHT	MODERATE	SERIOUS	SEVERE
0	1	2	3	4

HMIS*

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Oleic acid	100%	None established.
CAUTION! MAY CAUSE IRRITATION.		

SECTION III PHYSICAL DATA

Melting Point (°F)	11-14°C (52-57°F)	Specific Gravity (H ₂ O = 1)	0.895 at 25°/25°C
Boiling Point (°F)	> 315°C (>600°F)	Percent Volatile by Volume (%)	N/A
Vapor Pressure (mm Hg)	Non volatile.	Evaporation Rate (=1)	N/A
Vapor Density (Air=1)	Non volatile.		
Solubility in Water	Insoluble.		
Appearance & Odor	Light yellow liquid at 25°C; mild odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	380°F (193°C) (COC)	Flammable Limits in Air % by Volume	N/A	Lower	Upper
Extinguisher Media	Carbon dioxide; dry chemical.				

SPECIAL FIREFIGHTING PROCEDURES

Water or foam may cause frothing. **USE WATER WITH CAUTION.** Since this material is lighter than water and insoluble in water, the fire could easily be spread by the use of water in the area where the water would not be contained. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce hazardous decomposition products; can react with oxidizing materials.

Autoignition Temperature: 685°F (363°C).

D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA OX0010

Threshold Limited Value	None established by (ACGIH 2001). Toxicity: Oral-rat LD50: 74 grams/kg.; IRDS: skn-rbt 500 mg open MLD.
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Effects of Overexposure	INGESTION: Large amounts may result in gastrointestinal disturbances with irritation to mouth and stomach. SKIN AND EYES: May be mildly irritating on prolonged contact. INHALATION: Sufficient concentrations of vapor or mist may interfere with respiratory functions. Exercise Appropriate procedures to minimize potential hazards. Target organs: None known.
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Emergency and First Aid Procedures	INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. EYES: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. SKIN: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
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SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Exposure to air and protect from light. Excessive temperature and heat.
	Stable	X		

Incompatibility (Materials to Avoid)	Strong oxidizing materials.
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Hazardous Decomposition Products	Combustion will produce carbon dioxide and probably carbon monoxide.
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Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur
	X
Not applicable.	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Absorb spilled material with an inert dry material, sweep up and place in suitable container for disposal. Wash spill area with soap and water.
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Waste Disposal Method	Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.
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Dispose of in accordance with all Federal, state and local regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None needed in normal laboratory handling at room temperature. At elevated temperatures work in ventilation hood.
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Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Goggles, lab coat, apron, eye wash station, fire extinguisher.
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SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry place away from strong oxidizing materials and fire hazards. Wash thoroughly after handling.
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Keep container tightly closed when not in use.

Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.
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At atmospheric pressure it decomposes when heated at 80-100°C. On exposure to air, especially when impure, it oxidizes and acquires a yellow to brown color and rancid odor. Remove and wash contaminated clothing.

Revision No.	9	Date	01/04/07	Approved	James A. Bertsch	Chemical Safety Coordinator	JAB
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The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

221 Rochester Street
Avon, New York 14414-9409
(585) 226-6177

MSDS No.: IX0235
Effective Date: January 11, 2007

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	Isopropyl Alcohol
Chemical Synonyms	2-Propanol, Isopropanol
Formula	(CH ₃) ₂ CHOH
Unit Size	up to 3.785 Lt.
C.A.S. No.	67-63-0

	CHEMTREC 800-424-9300 Day 585-226-6177	Health	1	
		Fire	3	
		Reactivity	2	
NFPA		HMIS *		
HAZARD RATING				
MINIMAL	SLIGHT	MODERATE	SERIOUS	SEVERE
0	1	2	3	4

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Isopropyl alcohol	>99%	TWA: 400 ppm STEL: 500 ppm
WARNING! FLAMMABLE!		

HARMFUL IF SWALLOWED. CAUSES EYE IRRITATION.

SECTION III PHYSICAL DATA

Melting Point (°F)	-90°C (-130°F)	Specific Gravity (H ₂ O = 1)	0.786 - 0.79 @ 20°C
Boiling Point (°F)	82°C (180°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	33 mm @ 20°C	Evaporation Rate (n-Butyl acetate = 1)	2.3
Vapor Density (Air=1)	2.1		
Solubility in Water	Complete.		
Appearance & Odor	Clear, colorless liquid; mild alcohol odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	12°C (53°F) CC	Flammable Limits in Air % by Volume	Lower	Upper
			2%	12%
Extinguisher Media	"Alcohol foam", carbon dioxide, dry chemical, water spray.			

SPECIAL FIREFIGHTING PROCEDURES

If involved in fire situation, wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Use flooding amounts of water in early stages of fire.

Autoignition Temperature: 399°C (750°F) (ASTM-E659-78).
Cool Flame: 360°C (680°F) (ASTM-E659-78).

(2004 EMERGENCY RESPONSE GUIDEBOOK, RSPA P 5800.9, GUIDE PAGE NO. 129)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, or ignition sources at locations distant from material handling point. **CAUTION!** Flame may not be visible in daylight. Fire or excessive heat may produce hazardous decomposition products; can react vigorously with oxidizing materials.

D.O.T. Isopropanol, 3, UN1219, PG II, Ltd Qty ≤ 1 Lt.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA IX0235

Threshold Limited Value	TWA 400 ppm STEL: 500 ppm ACGIH 2001. Human, oral LDLo: 2371 mg/kg. Rabbit, skin LD50: 16 mg/kg.
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Effects of Overexposure	INGESTION: 100 mL can be fatal. Aspiration hazard. EYES: Liquid may cause irritation. SKIN: Prolonged or repeated contact may cause irritation and drying, cracking and defatting of the skin. INHALATION: Exposure to high concentrations (>400 ppm) may cause eye, nose and throat irritation and excessively high concentrations may cause narcosis (drowsiness, sleepiness). Target organs: Central nervous system, liver, kidneys.
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Emergency and First Aid Procedures	INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. EYES: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. SKIN: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
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SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Excessive temperature, heat, sparks or flame.
	Stable	X		
Incompatibility (Materials to Avoid)	Strong oxidizing materials, caustics, chlorinated compounds can react vigorously with this alcohol. Aluminum, metal, nitroform, oleum.			

Hazardous Decomposition Products	Thermal decomposition or burning will produce carbon dioxide and/or carbon monoxide.
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Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur
	X
Not applicable.	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Remove all ignition sources. Provide adequate ventilation. This material is handled and disposed of as a flammable liquid. Absorb small spills on paper; evaporate isopropyl alcohol in an exhaust hood; burn paper after evaporation. Prevent flow to sewers and public water ways.
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Waste Disposal Method	Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.
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Dispose of in an approved incinerator equipped with an afterburner and scrubber.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory use at room temperature. If misty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved respirator.			
Ventilation	Local Exhaust	None needed.	Special	No.
	Mechanical (General)	None needed.	Other	No.

Protective Gloves	Rubber.	Eye Protection	Chemical safety goggles.
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Other Protective Equipment	Lab coat, eye wash station, fire extinguisher, proper gloves, ventilation hood.
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SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool place away from oxidizing materials and fire hazards. Wash thoroughly after handling.
Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Avoid contact with skin and eyes. Avoid prolonged or repeated breathing of vapors. Use with adequate ventilation. Keep away from heat, sparks and flame. Keep container tightly closed when not in use. Remove and wash contaminated clothing.

Revision No. 13	Date 01/11/07	Approved James A. Bertsch	Chemical Safety Coordinator JAB
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