

MATERIAL SAFETY DATA SHEET

Manalox 130

FedChem
A Subsidiary of Federal Process Corporation

FedChem, L. L. C.
275 Keystone Drive
Bethlehem, PA 18020

HMIS: HEALTH-1 FIRE-3 REACTIVITY-1

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CHEMTREC (800) 424-9300
Emergency Phone Number (610) 837-1808

I. IDENTIFICATION & PHYSICAL DATA

Product Name: Manalox 130

Percent Volatile by Volume: 17.2

Product Class: Aluminum Trialkoxide

Boiling Range: 464-525 F

Manufacturer's I.D.: Bethlehem

Vapor Density: Heavier than air

VOC: 138 g/l

Specific Gravity: .9200

Solubility in Water: Incompatible

Density: 7.68 Pounds/Gallon

Evaporation Rate: Slower Than Butyl Acetate

Vapor Pressure at 20 C: <0.1 mm Hg

Appearance and Odor: Clear amber mobile liquid (<1000 cps) with mild odor

II. HAZARDOUS INGREDIENTS

	CAS #	WT %	OSHA TWA ppm	OSHA STEL ppm	ACGIH TWA ppm	ACGIH STEL ppm
Aluminum Alkoxide	**	36	---	---	---	---
Aluminum Alkoxide	**	49	---	---	---	---
Mineral Oil	8042-47-5	15	5 mg/M3 Oil mist in air	---	5 mg/M3 Oil mist in Air	10mg/M3

**The specific chemical identity is being withheld as a trade secret.

--- Not Established.

All components of this product are listed on the TSCA registry or are otherwise compliant (exempt or regulated by another agency).

III. FIRE & EXPLOSION DATA

Flashpoint: 74 F Pensky-Martens

LEL: < 1.10 est

Extinguishing Media:

Carbon dioxide, dry chemical or foam. Water reacts and forms flammable isopropyl alcohol. If water is used, copious quantities are needed.

Unusual Fire and Explosion Hazards:

Flammable; escaping vapors may ignite which can result in a flash fire. Closed containers may explode (due to buildup of pressure) when exposed to extreme heat.

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and complete personal protective equipment when entering confined areas where potential for exposure to vapors or products of combustion exists.

IV. REACTIVITY DATA

Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to Avoid:

Excessive heat and contact with moisture.

Materials to Avoid:

Acids, and strong oxidizing agents. Contact with moisture may generate heat in mass and can result in the release of isopropyl alcohol which is flammable.

Hazardous Decomposition Products:

Fumes produced when heated to decomposition may include: carbon monoxide, carbon dioxide.

To the best of our knowledge, the information contained herein is accurate. However, no liability whatsoever is assumed for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

V. HEALTH HAZARD DATA

Effects of Overexposure:

Ingestion: No specific Information Available

Contains materials that may be practically nontoxic.

Inhalation: No specific Information Available

Heating or contact with moisture can generate vapors that could cause headaches, nausea, dizziness, and respiratory irritation if inhaled.

Skin Absorption: No specific Information Available

Contains materials that may be practically nontoxic.

Skin Contact: No specific Information Available

Contains materials that may cause skin irritation on prolonged or repeated exposure.

Eye Contact: No specific Information Available

Contains materials that may cause eye injury which may persist for several days.

Chronic Effects of Overexposure:

No Specific Information Available

Emergency and First Aid Procedures:

Eye Contact:

Flush with plenty of water for at least 15 minutes and seek medical attention.

Skin Contact:

Remove contaminated clothing and wash contact area with soap and water for 15 minutes.

Ingestion:

If appreciable quantities are swallowed, seek medical attention.

Inhalation:

In case of exposure to a high concentration of vapor or mist, remove person to fresh air. If breathing has stopped, administer artificial respiration and seek medical attention.

VI. SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material Is Released or Spilled:

Ventilate area and remove ignition sources. Dike spill, absorb with inert material, and collect to disposal. Flush area with copious amounts of water.

Warning: Isopropyl alcohol will be released to the flush water and atmosphere. Spills or releases to the environment may be reportable to the National Response Center, (800) 424-8802, and to state and/or local agencies.

Waste Disposal Method:

Incinerate or use biological treatment in accordance with federal, state, and local regulations. This material is a hazardous waste under current RCRA regulations because of ignitability.

VII. SPECIAL PROTECTION INFORMATION

Respiratory Protection:

Wear a properly fitted NIOSH/MSHA approved respirator whenever exposure to vapor/mist is likely unless levels are below applicable limits.

Ventilation:

Local Exhaust - Recommended when appropriate to control employee exposure.

Mechanical - Not recommended as the sole means of controlling employee exposure.

Protective Gloves: For operations where contact can occur, wear impervious gloves (Neoprene).

Eye Protection: Chemical splash goggles.

Other Protective Equipment: For operations where contact can occur, a safety shower and eye wash facility should be available.

VIII. SPECIAL PRECAUTIONS

Avoid contamination of skin. Remove and thoroughly launder contaminated clothing before reuse. Do not apply to hot surfaces or use in areas where exposed to electric sparks. Ground containers when transferring from one to another. KEEP CONTAINER TIGHTLY CLOSED. Atmospheric moisture destroys product and produces isopropyl alcohol which is flammable. Store in a cool dry place away from open flames.

IX. STATE R-T-K COMPOSITION INFORMATION**(And Canada)**

Component	CAS	WT %	DSL	NDSL
Aluminum Alkoxide	Confidential	36	No	Yes
Aluminum Alkoxide	Confidential	49	Yes	No
Mineral Oil	8042-47-5	15	Yes	No

X. SARA Title III Section 313 Information

This product does not contain any SARA Title III Section 313 chemicals.

XI. RCRA Information

Regulated Waste: Yes, Flammable

Disposal Code D001

XII. CERCLA Information

Under EPA-CERCLA, releases to air, land, or water which exceed the reportable quantity must be reported to the National Response Center (800-424-8802).

This product contains no materials with reportable quantities. However, if product is spilled and the unrecoverable and/or unusable amount exceeds or equals 100 pounds the spill must be reported.

XIII. California Proposition 65 Information

To the best of our knowledge, this product does not contain any California Proposition designated chemicals.

XIV. Transportation Information

D.O.T. Shipping Name: Flammable Liquid, N.O.S. (Aluminum trialkoxide)

D.O.T. Hazard Class: Flammable Liquid, 3

D.O.T. UN/NA Number: UN 1993, PG III

XV. Other Information

Composition information is typical and is not to be construed to be a specification.

XVI. International Regulatory Lists

Country	List	Status
Australia	AICS	N
Canada	DSL	N
China	IECSC	Y
Europe	EINECS/ELINCS	N
Japan	ENCS	?
Korea	ECL	N
New Zealand		?
Phillipines	PICCS	N
Taiwan	TCS/TTSCA	?

KEY: 'Y' = All components are on the country's list; 'N' = One or more ingredients are not on the Country's list; '?' = Not Determined