MATERIAL SAFETY DATA SHEET

ALDON CORPORATION
1533 W.Henrietta Rd.
Avon, New York 14414
(716) 226-6177

MSDS No. MM 311
Effective Date March 26, 1999

SECTION I NAME

24 HOUR EMERGENCY ASSISTANCE

CHEMTREC **800-424-9300**
Day 716-226-6177

Product	MERCUROUS NITRATE, DIHYDRATE
Chemical Synonyms	Mercury Protonitrate, Mercury (I) Nitrate
Formula	$Hg_2(NO_3)_2 \cdot 2H_2O$
Unit Size	up to 2.5 Kg.
C.A.S. No.	14836-60-3

NFPA HAZARD RATING

Health	3
Fire	0
Reactivity	0

HMIS *

LEAST	SLIGHT	MODERATE	HIGH	EXTREME
0	1	2	3	4

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Mercurous Nitrate, dihydrate	100%	See Section V.

DANGER! POISON! STRONG OXIDIZER!

MAY BE FATAL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.

SECTION III PHYSICAL DATA

Melting Point (°F)	Decomposes @ 70°C (158°F)	Specific Gravity (H_2O = 1)	4.78 @ 4°C
Boiling Point (°F)	Not applicable.	Percent Volatile by Volume (%)	Not applicable.
Vapor Pressure (mm Hg)	Not applicable.	Evaporation Rate (=1)	Not applicable.
Vapor Density (Air=1)	Not applicable.		
Solubility in Water	Soluble in 13 parts 1% nitric acid.		
Appearance & Odor	Colorless to slightly yellow crystals, granular, crystalline powder; slight odor of nitric acid.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

			Lower	Upper
Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume N/A		
Extinguisher Media	Use any media suitable for extinguishing supporting fire.			

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

(1996 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.7, GUIDE PAGE NO. 141)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat will cause mercurous nitrate to sublime, release mercury vapor or explode upon heating. Oxidizing material. In contact with easily flammable substances it may react rapidly enough to cause ignition, violent combustion or explosion. Increases the flammability of any combustible substance.

D.O.T. **Mercurous nitrate, 6.1, UN 1627, PG II**

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

SECTION V HEALTH HAZARD DATA

MM 311

Threshold Limited Value

TWA: 0.5 mg(Hg)/m^3; CEIL: 0.15 mg/m^3. Mercury (I) Nitrate: RTECS No. OW8000000 TXDS: Oral-rat LD50: 170 mg/kg. ; TLV-TWA 100 ug(Hg)/m^3 (Skin).

Effects of Overexposure

TARGET ORGANS AFFECTED: Central nervous system, kidneys. **INGESTION:** Highly toxic. Mercury poisoning - may cause death if swallowed. Toxic by skin absorption. **SKIN:** May produce dermatitis and takes the form of small, discrete ulcers on the exposed parts, and is usually accompanied by conjunctivitis and inflammation of the mucous membranes of the nose and throat. **EYES:** Severe irritation, may cause blindness.

Emergency and First Aid Procedures

INGESTION: If swallowed, if conscious, give one or two glasses of water to drink, induce vomiting and repeat until vomit fluid is clear. Call physician immediately. Never give anything by mouth to an unconscious person. **SKIN:** Flush with water and follow by washing with mild soap and water. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **EYES:** Check for and remove any contact lenses. DO NOT use an eye ointment. Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids. Get prompt medical attention.

SECTION VI REACTIVITY DATA

Stability			Conditions to Avoid
	Unstable		Excessive temperature, heat and ignition sources. Protect from light.
	Stable	X	

Incompatibility (Materials to Avoid) Reducing agents, phosphorus.

Hazardous Decomposition Products Thermal decomposition or burning emits mercury vapor and oxides of nitrogen (NO_x).

Hazardous Polymerization		Conditions to Avoid
May Occur	Will Not Occur	Not applicable.
	X	

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Wearing suitable protective clothing, sweep up and place in a suitable container for disposal. Wash spill area with soap and water. **DO NOT FLUSH TO SEWER!** Collect wash water for disposal with spilled mercury compound.

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.

Dispose of by (1) sending to a licensed Mercury Recovery firm (2) contract with a licensed waste disposal service (3) approved chemical landfill.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) Work in ventilation hood. If dusty conditions prevail, wear a NIOSH/MSHA-approved dust mask. For mercury fumes or vapor wear a NIOSH/MSHA-approved respirator.

Ventilation				
	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	Adequate to maintain below exposure limit.

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.

Other Protective Equipment Splash goggles, lab coat, apron, ventilation hood, impervious gloves, eye wash station.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing

Keep container tightly closed when not in use.

Store in a cool, dry place away from heat and sources of ignition. Keep away from combustible materials. DO NOT ingest. DO NOT breathe dust. Wash thoroughly after handling.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals.

Decomposed by large amounts of water. May be explosive if shocked or heated. Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision	No. 6	Date	3/26/99	Approved	Michael Raszeja	Chemical Safety Coordinator	MR