

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME Great Western Inorganics		EMERGENCY TELEPHONE NO. 303-423-9770
ADDRESS (Number, Street, City, State, and ZIP Code) 17400 Highway 72, Golden, Colorado 80403		
CHEMICAL NAME AND SYNONYMS Mercury II Nitrate	TRADE NAME AND SYNONYMS	
CHEMICAL FAMILY Inorganic	FORMULA $\text{Hg}(\text{NO}_3)_2 \cdot \frac{1}{2} \text{H}_2\text{O}$	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Mercury at 100 % 8-hour TWA		.05mg/m ³
Contact with acetylene in solution gives explosive mercury acetylide,		
with aqueous solution ethanol gives mercury II Fulminate, aqueous solution		
reacts with phosphine to give explosive complex, risk of violent reactions		
with petroleum hydrocarbons.		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	d	SPECIFIC GRAVITY (H ₂ O=1)	Density	4.39
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)		
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ = 1)		
SOLUBILITY IN WATER	very			
APPEARANCE AND ODOR	white-yellowish crystals or powder, no odor, deliquescent			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	noncombustible	FLAMMABLE LIMITS	LeI	UeI
EXTINGUISHING MEDIA	select media suitable to surrounding fire; comp. nonflammable, nonexplosive in air.			
SPECIAL FIRE FIGHTING PROCEDURES	When exposed to high temperature, Hg vaporizes to form extremely toxic fumes.			
	When this material is involved in a fire, firefighters need to use self-contained breathing apparatus.			
UNUSUAL FIRE AND EXPLOSION HAZARDS				

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

as Hg .05 mg/m³

EFFECTS OF OVEREXPOSURE

Inhalations of dust may cause nausea, abdominal pain, vomiting, diarrhea and headache. Skin absorption may give rise to similar effects and eyes may be damaged by dust contact. Chronic effect: CNS disorders; kidney damage.

EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with running water 15 minutes, including under eye lids.

Skin: Remove contaminated clothing, wash with soap and water.

Inhalation: Remove to fresh air, support breathing, O₂

Ingestion: Gastric lavage with 5% Sodium formaldehyde sulfoxylate, followed by 2% NaHCO₃, then leave 250ml of sodium formaldehyde sulfoxylate in stomach. Seek medical at

SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

as listed in part II

STABLE

X

INCOMPATIBILITY (Materials to avoid)

HAZARDOUS DECOMPOSITION PRODUCTS

Mercury Vapor

HAZARDOUS
POLYMERIZATION

MAY OCCUR

CONDITIONS TO AVOID

WILL NOT OCCUR

X

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Small quantities can be swept up, dissolved in water or acid and run to waste at very high dilution. Recovery may be warranted in the case of large amounts but the disposal of these must be considered carefully in the light of local conditions and regulations. If burial is carried out in an isolated area the solid compound should

WASTE DISPOSAL METHOD

First be diluted 10-20 times by weight with sand.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

toxic particulate dust mask

VENTILATION

LOCAL EXHAUST

fume hood

SPECIAL

MECHANICAL (General)

OTHER

PROTECTIVE GLOVES

yes- must be impervious

EYE PROTECTION

safety glasses

OTHER PROTECTIVE EQUIPMENT

lab apron or rubber suit for larger quantities

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep containers tightly closed. Avoid

spills when handling.

OTHER PRECAUTIONS