



## Safety Data Sheet

In accordance with CFR 1910.1200 (OSHA HCS)

SDS No. 1300

Review Date: November 4, 2019

### 1 Identification of substance and company

**Product name:** **Mercury (I) chloride**  
**Product code:** 15661  
**Relevant use and restrictions on use:** Research and product development  
**Manufacturer/Supplier:** Noah Technologies Corporation  
1 Noah Park  
San Antonio, Texas 78249-3419  
Phone: 210-691-2000  
Fax: 210-691-2600  
Web site: www.noahtech.com  
**Emergency information:** CHEMTREC  
800-424-9300

### 2 Hazards identification

**Emergency Overview:**

**Pictogram(s):**



**Signal word(s):**

Danger

**Hazard statements:**

H301 Toxic if swallowed  
H312 Harmful in contact with skin  
H315 Causes skin irritation  
H319 Causes serious eye irritation  
H335 May cause respiratory irritation  
H400 Very toxic to aquatic life

**Precautionary statements:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray  
P264 Wash skin thoroughly after handling  
P270 Do not eat, drink or smoke when using this product  
P271 Use only outdoors or in a well-ventilated area  
P273 Avoid release to the environment  
P280 Wear protective gloves / protective clothing / eye protection / face protection  
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician  
P302+352 IF ON SKIN: Wash with plenty of water  
P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 Call a POISON CENTER or doctor if you feel unwell  
P321 Specific treatment (see additional instruction on this label)  
P330 Rinse mouth  
P332+313 IF SKIN irritation occurs: Get medical advice/ attention  
P337+313 If eye irritation persists: Get medical advice/ attention  
P362+364 Take off contaminated clothing and wash before reuse  
P314 Get medical advice / attention if you feel unwell  
P362+364 Take off contaminated clothing and wash before reuse  
P391 Collect spillage  
P403+233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up  
P501 Dispose of contents/ container to an approved waste disposal plant

**GHS Classification:**

Acute toxicity, oral - 3  
Acute toxicity, dermal - 4  
Skin corrosion/ irritation - 2  
Serious eye damage/ eye irritation - 2A  
Specific target organ toxicity (single exposure), respiratory tract irritation - 3  
Hazardous to the aquatic environment, acute hazard - 1

<b>Hazards not otherwise classified:</b>	None
<b>HMIS ratings (scale 0-4):</b>	Health hazard: 3
	Flammability: 0
	Physical hazard: 0

### 3 Composition/Information on ingredients

<b>Chemical name:</b>	Mercury (I) chloride
<b>CAS number:</b>	10112-91-1
<b>EC number:</b>	233-307-5
<b>Formula:</b>	Hg <sub>2</sub> Cl <sub>2</sub>
<b>Synonyms:</b>	Mercurous chloride, dimercury dichloride, Calomel

### 4 First aid measures

<b>After inhalation:</b>	Move victim to fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>After skin contact:</b>	Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
<b>After eye contact:</b>	Flush with plenty of water for at least 15 minutes. Consult a physician.
<b>After ingestion:</b>	Never given anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
<b>Information for doctor:</b>	Show this safety data sheet to the doctor in attendance
<b>Symptoms/effects; acute and delayed:</b>	Salivation with metallic taste, pain on chewing, gingivitis, colitis, stomatitis, kidney damage and central nervous system damage. The latter can cause tremors, convulsive or shaking movements and psychic disturbances such as memory loss, insomnia, loss of confidence, irritability and depression. Excessive exposure may result in death.
<b>Immediate medical attention and special treatment needed:</b>	See above

### 5 Fire-fighting measures

<b>Suitable and unsuitable extinguishing agents:</b>	Water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use extinguishing media most suitable to surrounding fire conditions.
<b>Special hazards caused by the material, its products of combustion or resulting gases:</b>	Oxides of mercury, hydrogen chloride Do not allow run-off from fire fighting to enter drains or water courses
<b>Special fire fighting procedures:</b>	Wear self-contained breathing apparatus. Always wear full fire fighting equipment / clothing in fire situations.
<b>Unusual fire and explosion hazard:</b>	No data available

### 6 Accidental release measures

<b>Person-related safety precautions:</b>	Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe area.
<b>Measures for environmental protection:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
<b>Measures for cleaning/collecting:</b>	Avoid dusting. Use vacuum equipped with HEPA filter. Keep in suitable, closed containers for disposal.
<b>Additional information:</b>	See Section 7 for information on safe handling See Section 8 for information on personal protective equipment See Section 13 for information on disposal See Section 15 for regulatory information

### 7 Handling and storage

<b>Information for safe handling:</b>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Ensure adequate ventilation.
<b>Information about protection against explosions and fires:</b>	No data available
<b>Storage requirements to be met by storerooms and containers:</b>	Keep container tightly closed in a dry and well-ventilated area. Store in a cool, dry place.
<b>Incompatibility (avoid contact with):</b>	Strong oxidizers. Strong bases. Light. Bromides, iodides, alkali chlorides, sulfates, sulfites, carbonates, hydroxides, lime water, cyanides, antimony sulfide, copper salts, hydrogen peroxide, iodine, iodoform, lead salts, silver salts, sulfides
<b>Further information about storage conditions:</b>	Keep away from heat, sparks and open flames

### 8 Exposure controls/personal protection

<b>Ventilation requirements:</b>	Chemical fume hood.
<b>Components with exposure limits that require monitoring:</b>	ACGIH TLV: TWA 0.025 mg (Hg)/m <sup>3</sup> (skin) NIOSH REL: TWA 0.05 mg (Hg)/m <sup>3</sup> (skin); CL 0.1 mg(Hg)/m <sup>3</sup> (skin)
<b>General protective and hygienic measures:</b>	The usual precautionary measures for handling chemicals should be adhered to Keep away from foodstuffs, beverages and food Instantly remove any soiled and impregnated garments Wash hands during breaks and at the end of the work Avoid contact with the eyes and skin

<b>Respiratory protection:</b> (Use only NIOSH or CEN approved Equipment)	Filter-dust, fume, mist
<b>Hand protection:</b>	Handle with gloves: Natural rubber / Neoprene / Impervious Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with product.
<b>Eye protection:</b>	Goggles
<b>Skin protection:</b>	Protective work clothing sufficient to prevent contact.
<b>Additional protective equipment:</b>	Emergency eyewash and safety shower.
<b>Precautionary labeling:</b>	Do not get in eyes, on skin or on clothing Do not breathe dust, vapor, mist or gas Keep container closed Empty container may contain hazardous residues Light sensitive TOXIC - always wear personal protective equipment

### 9 Physical and chemical properties

<b>Physical state:</b>	Crystalline powder
<b>Color:</b>	White to off-white
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	No data available
<b>Molecular Weight (Calculated):</b>	472.09
<b>pH</b>	No data available
<b>Melting point/freezing point/range:</b>	400 °C
<b>Boiling point/range:</b>	No data available
<b>Sublimation temperature/start:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Flammability (solid, gas):</b>	Not flammable
<b>Flash point:</b>	No data available
<b>Autoignition temperature:</b>	No data available
<b>Danger of explosion:</b>	No data available
<b>Flammable limits:</b>	
<b>Lower:</b>	No data available
<b>Upper:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Vapor pressure (mm Hg):</b>	No data available
<b>Vapor density:</b>	No data available
<b>Specific gravity:</b>	7.15
<b>Bulk density:</b>	No data available
<b>Solubility in/Miscibility with water:</b>	0.002 g/L @ 25 °C
<b>Partition coefficient n-octanol/water:</b>	No data available
<b>Viscosity:</b>	No data available
<b>Other information:</b>	No data available

### 10 Stability and reactivity

<b>Reactivity:</b>	No data available
<b>Chemical stability:</b>	Stable under recommended storage conditions
<b>Possibility of hazardous reactions:</b>	No data available
<b>Conditions to be avoided:</b>	Heat See section 7 for information on proper handling and storage
<b>Materials to be avoided:</b>	Strong oxidizers. Strong bases. Light. Bromides, iodides, alkali chlorides, sulfates, sulfites, carbonates, hydroxides, lime water, cyanides, antimony sulfide, copper salts, hydrogen peroxide, iodine, iodoform, lead salts, silver salts, sulfides
<b>Dangerous reactions:</b>	No data available
<b>Hazardous decomposition products:</b> (thermal and other)	Oxides of mercury, hydrogen chloride

### 11 Toxicological information

<b>LD/LC50 values that are relevant for classification:</b>	oral-rat LD <sub>50</sub> : 210 mg/kg skin-rat LD <sub>50</sub> : 1500 mg/kg
<b>Irritation or corrosion of skin:</b>	No data available
<b>Irritation or corrosion of eyes:</b>	No data available
<b>Primary irritant or corrosive effect:</b>	
<b>on the skin:</b>	Causes irritation
<b>on the eye:</b>	Causes irritation
<b>Sensitization:</b>	No data available
<b>Potential health effects:</b>	
<b>Inhalation:</b>	Causes irritation to the lungs and upper respiratory tract

**Ingestion:** No data available  
**Skin:** No data available  
**Eyes:** No data available  
**Signs and symptoms of exposure:** Acute and chronic exposure to inorganic mercury can cause salivation with metallic taste, pain on chewing, gingivitis, colitis, stomatitis, kidney damage and central nervous system damage (CNS). CNS damage can cause tremors, convulsive or shaking movements and psychic disturbances such as memory loss, insomnia, loss of confidence, irritability and depression. Ingestion may cause transient stimulation of CNS followed by depression, vomiting, drowsiness, coma, respiratory failure, convulsions, and sometimes leading to fatal kidney injury. Excessive exposure may result in death.

**Carcinogenicity:** IARC: Group 3 - Not classifiable as to its carcinogenicity to humans  
 NTP: No component of this product is identified as a known or anticipated carcinogen by NTP.  
 OSHA: No component of this product is identified as a carcinogen or potential carcinogen by OSHA.

**Additional information:** To the best of our knowledge the acute and chronic toxicity of this substance is not fully known

### 12 Ecotoxicological information

**Toxicity:**  
**Toxicity to fish:** Golden orfe LC<sub>50</sub>: 0.5 mg/L:48H  
**Toxicity to daphnia and other aquatic invertebrates:** Daphnia magna EC<sub>50</sub>: 0.002 mg/L:48H  
**Toxicity to algae:** No data available  
**Persistence and degradability:**  
**Biodegradability:** No data available  
**Bioaccumulative potential:**  
**Bioaccumulation:** No data available  
**Mobility in soil:** Is not likely mobile in the environment due to its low water solubility  
**Other adverse effects:** Very toxic to aquatic life with long lasting effects

### 13 Disposal considerations

**Recommendation:** Consult state, local or national regulation for proper disposal  
 Allow professional disposal company to handle waste  
 Must be specially treated under adherence to official regulations

**Unclean packagings recommendation:** Disposal must be made according to official regulations

### 14 Transport information

#### Land transport DOT



**Proper shipping name:** Mercury compounds, solid, n.o.s.  
**Technical name:** Mercury (I) chloride  
**DOT Hazard Class:** 6.1  
**UN Identification number:** UN2025  
**Label(s):** Toxic and Marine Pollutant  
**Packing group:** III  
**North American Emergency Response Guidebook No.:** 151

#### Air transport ICAO-TI and IATA-DGR:



**Proper shipping name:** Mercury compound, solid, n.o.s.  
**Technical name:** Mercury (I) chloride  
**DOT Hazard Class:** 6.1  
**UN Identification number:** UN2025  
**Label(s):** Toxic and Marine Pollutant  
**Packing group:** III  
**North American Emergency Response Guidebook No.:** 151

#### UPS Ground / FedEx Ground



**Proper shipping name:** Mercury compounds, solid, n.o.s.  
**Technical name:** Mercury (I) chloride  
**DOT Hazard Class:** 6.1  
**UN Identification number:** UN2025

**Label(s):** Toxic and Marine Pollutant  
**Packing group:** III  
**North American Emergency Response Guidebook No.:** 151

UPS Air



**Proper shipping name:** Mercury compounds, solid, n.o.s.  
**Technical name:** Mercury (I) chloride  
**DOT Hazard Class:** 6.1  
**UN Identification number:** UN2025  
**Label(s):** Toxic and Marine Pollutant  
**Packing group:** III  
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#### 15 Regulatory information

**SARA Section 302 Extremely Hazardous components and corresponding TPQs:**

Mercuric chloride TPQ 0.1/10 lb

**SARA Section 311 / 312 hazards:**

Acute Health Hazard; Chronic Health Hazard

**SARA Section 313 components:**

This product contains chemical(s) subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-to-know Act of 1986 and 40CFR372

**California Proposition 65 components:**

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**TSCA:**

Product is listed on the TSCA Inventory

#### 16 Other information

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulation are subject to change and the conditions of handling and use, or misuse are beyond our control. NOAH MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use.