



# Safety Data Sheet

In accordance with CFR 1910.1200 (OSHA HCS)

SDS No. 110

Date of review: May 28, 2020

## 1 Identification of substance and company

**Product name:** **Mercury ammonium chloride**  
**Product code:** 11587  
**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:



**Signal word(s):** Danger

**Pictogram(s):** Skull and crossbones  
 Health hazard  
 Environment

**Hazard statements:** H300+310+330 Fatal if swallowed, in contact with skin or if inhaled  
 H373 May cause damage to organs through prolonged or repeated exposure  
 H410 Very toxic to aquatic life with long lasting effects

**Precautionary statements:** P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray  
 P262 Do not get in eyes, on skin, or on clothing  
 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  
 P284 Wear respirator protection  
 P301+310+330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.  
 P302+P350+P310 IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/ physician  
 P304+340+310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician  
 P314 Get medical advice/ attention if you feel unwell  
 P361 Remove/ Take off immediately all contaminated clothing  
 P363 Wash contaminated clothing before use  
 P391 Collect spillage  
 P403+P233 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.

**Hazards not otherwise classified:** None

**Ingredients of unknown acute toxicity:** None

**GHS Classification:** Acute toxicity, Oral - 2  
 Acute toxicity, Inhalation - 2  
 Acute toxicity, Dermal - 1  
 Specific target organ toxicity - repeated exposure - 2  
 Acute aquatic toxicity - 1  
 Chronic aquatic toxicity - 1

**HMIS ratings (scale 0-4):** Health hazard: 3\*

Flammability: 0  
Physical hazard: 0

### 3 Composition/Information on ingredients

**Chemical name:** Mercury ammonium chloride  
**Designation:**  
**CAS number:** 10124-48-8  
**EC number:** 233-335-8  
**Formula:** NH<sub>2</sub>HgCl  
**Synonyms:** Ammoniated mercury, mercury (II) amidochloride  
**Ingredients of known acute toxicity:** Mercury ammonium chloride

### 4 First aid measures

**After inhalation:** Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**After skin contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**After eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

**After ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Information for doctor:** Show this safety data sheet to the doctor in attendance

**Symptoms/effects; acute and delayed:** Exposure to mercury compounds can cause tremors, loss of appetite, anuria, uremia, weight loss, lack of coordination, insomnia, irritability, fatigue, anxiety, anorexia, hallucinations, headache, depression, stomatitis, nausea, vomiting, diarrhea, metallic taste, muscle weakness, loosening of the teeth, pain, numbness in the extremities, nephritis, peripheral neuropathy, collapse, and death. After absorption it circulates in the blood and accumulates in almost all tissues, especially in the brain, liver and kidneys.

**Immediate medical attention and special treatment needed:** See above

### 5 Fire-fighting measures

**Suitable and unsuitable extinguishing agent:** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**Special hazards caused by the material, its products of combustion or resulting gases:** Mercury, hydrogen chloride, oxides of mercury and nitrogen (NO<sub>x</sub>)

**Special fire fighting procedures:** Wear self-contained breathing apparatus and fully protective fire fighting equipment/clothing

**Unusual fire and explosion hazard:** Explosive reaction with halogens or amine metal salts

### 6 Accidental release measures

**Person-related safety precautions:** Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Measures for environmental protection:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Measures for cleaning/collecting:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for proper disposal.

**Additional information:** 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

**Information for safe handling:** Avoid contact with skin and eyes. Avoid dust formation. Provide appropriate exhaust ventilation. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

**Information about protection against explosions and fires:** No data available

**Storage requirements to be met by storerooms and containers:** Keep container tightly closed in a dry and well-ventilated place

**Incompatibility (avoid contact with):** Strong acids and oxidizers. Reacts explosively with halogens or amine metal salts.

**Further information about storage condition:** Protect from light - causes decomposition

### 8 Exposure controls/personal protection

**Ventilation requirements:** Local exhaust, chemical fume hood

**Components with exposure limits that require monitoring:** NIOSH REL: TWA 0.01 mg(Hg)/m<sup>3</sup>  
ACGIH TLV: TWA 0.025 mg(Hg)/m<sup>3</sup>; Target organs; kidneys, CNS

**Additional information:** No additional data available

**General protective and hygienic measures:** 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

**Personal protective equipment:**

**Respiratory protection:** Filter-dust, fume, mist; respirator equipped with HEPA

**(Use only NIOSH or CEN approved Equipment)**

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique.

**Eye protection:** Safety glasses, goggles

**Skin protection:** Completely covering work attire with full length apron

**Additional protective equipment:** Sufficient to prevent contact. Emergency eyewash and safety shower

**Precautionary labeling:** Wash thoroughly after handling  
 Do not get in eyes, on skin or on clothing  
 Do not breathe dust, vapor, mist, gas  
 Keep away from heat, sparks, and open flames  
 Empty container may contain hazardous residues

**9 Physical and chemical properties**

<b>Physical state:</b>	Powder
<b>Color:</b>	White to off-white
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined
<b>Molecular Weight (Calculated):</b>	252.07
<b>pH</b>	Not determined
<b>Melting point/freezing point/range:</b>	Not determined
<b>Boiling point/range:</b>	Not determined
<b>Sublimation temperature/start:</b>	Not determined
<b>Decomposition temperature:</b>	Not determined
<b>Flammability (solid, gas):</b>	Not determined
<b>Flash point:</b>	Not determined
<b>Autoignition temperature:</b>	Not determined
<b>Danger of explosion:</b>	Not determined
<b>Flammable limits:</b>	Non-flammable
<b>Lower:</b>	Not determined
<b>Upper:</b>	Not determined
<b>Vapor pressure (mm Hg):</b>	Not determined
<b>Vapor density:</b>	Not determined
<b>Specific gravity:</b>	5.70 g/cm <sup>3</sup> at 20C
<b>Bulk density:</b>	Not determined
<b>Solubility in/Miscibility with water:</b>	1.4 g/L @ 25 C
<b>Partition coefficient n-octanol/water:</b>	Not determined
<b>Viscosity:</b>	Not determined
<b>Other information:</b>	Not determined

**10 Stability and reactivity**

<b>Reactivity:</b>	Not determined
<b>Chemical stability:</b>	Stable under recommended storage conditions
<b>Possibility of hazardous reactions:</b>	Not determined
<b>Conditions to be avoided:</b>	Protect from light - causes decomposition
<b>Materials to be avoided:</b>	See section 7 for information on proper handling and storage
<b>Dangerous reactions:</b>	Explosive reaction with halogens or amine metal salts
<b>Hazardous decomposition products: (thermal and other)</b>	Mercury, hydrogen chloride, oxides of mercury and nitrogen (NO <sub>x</sub> )

**11 Toxicological information**

<b>LD/LC50 values that are relevant for classification:</b>	oral-rat LD <sub>50</sub> : 86 mg/kg skin-rat LD <sub>50</sub> : 1325 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>	No data available
<b>on the eye:</b>	No data available
<b>Sensitization:</b>	No data available
<b>Potential health effects:</b>	
<b>Inhalation:</b>	No data available
<b>Ingestion:</b>	No data available
<b>Skin:</b>	No data available
<b>Eyes:</b>	No data available

**Signs and symptoms of exposure:** Exposure to mercury compounds can cause tremors, loss of appetite, anuria, uremia, weight loss, lack of coordination, insomnia, irritability, fatigue, anxiety, anorexia, hallucinations, headache, depression, stomatitis, nausea, vomiting, diarrhea, metallic taste, muscle weakness, loosening of the teeth, pain, numbness in the extremities, nephritis, peripheral neuropathy, collapse, and death. After absorption it circulates in the blood and accumulates in almost all tissues, especially in the brain, liver and kidneys.  
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known

**Carcinogenicity:** No data available

**Additional information:** No data available

### 12 Ecotoxicological information

**Toxicity:**

**Toxicity to fish:** No data available

**Toxicity to daphnia and other aquatic invertebrates:** No data available

**Toxicity to algae:** No data available

**Persistence and degradability:**

**Biodegradability:** No data available

**Bioaccumulative potential:**

**Bioaccumulation:** No data available

**Mobility in soil:** No data available

**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 ammonium chloride

**DOT Hazard Class:** 6.1

**UN Identification number:** UN1630

**Label(s):** Toxic and Marine Pollutant

**Packing group:** II

**Reportable quantity (RQ):**

**North American Emergency Response Guidebook No.:** 151

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



**Proper shipping name:** Mercury ammonium chloride

**DOT Hazard Class:** 6.1

**UN Identification number:** UN1630

**Label(s):** Toxic and Marine Pollutant

**Packing group:** II

**Reportable quantity (RQ):**

**North American Emergency Response Guidebook No.:** 151

#### UPS Ground / FedEx Ground



**Proper shipping name:** Mercury ammonium chloride

**DOT Hazard Class:** 6.1

**UN Identification number:** UN1630

Label(s): DOT-SP-8249 and Marine Pollutant  
Packing group: II  
Reportable quantity (RQ):  
North American Emergency Response  
Guidebook No.: 151

UPS Air



Proper shipping name: Mercury ammonium chloride  
DOT Hazard Class: 6.1  
UN Identification number: UN1630  
Label(s): DOT-SP-8249 and Marine Pollutant  
Packing group: II  
Reportable quantity (RQ):  
North American Emergency Response  
Guidebook No.: 151

#### 15 Regulatory information

**SARA Section 302 Extremely Hazardous components and corresponding TPQs:** Not subject  
**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 cancer and birth defects or other reproductive harm  
**TSCA:** Product is listed on 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.