

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product Name** MSHG-10PPM

**Product Description** 10 µg/mL: Hg  
Contains Hydrogen chloride

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Laboratory chemicals

**Uses advised against** No information available

### 1.3. Details of the supplier of the safety data sheet

#### Company

Inorganic Ventures  
300 Technology Drive  
Christiansburg, VA 24073  
Phone: 1(800) 669-6799  
Email: info@inorganicventures.com

### 1.4. Emergency telephone number

Chemtrec 1-800-424-9300 (North America)

Chemtrec +1 703-741-5970 (International)

|        |           |
|--------|-----------|
| Europe | See above |
|--------|-----------|

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to  
Regulation (EC) No. 1272/2008 [CLP]

#### GHS

|                                     |                     |
|-------------------------------------|---------------------|
| Acute toxicity - Inhalation (Gases) | Category 4 - (H332) |
| Skin corrosion/irritation           | Category 2 - (H315) |
| Serious eye damage/eye irritation   | Category 1 - (H318) |
| Corrosive to metals                 | Category 1 - (H290) |

### 2.2. Label elements

#### Product identifier

Contains Hydrogen chloride



**Signal word**

Danger

**Hazard statements**

H290 - May be corrosive to metals

H315 - Causes skin irritation

H318 - Causes serious eye damage

H332 - Harmful if inhaled

**Precautionary Statements - EU (§28, 1272/2008)**

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

**2.3. Other hazards**

No information available

**SECTION 3: Composition/information on ingredients****3.1 Substances**

| Chemical name     | EC No. (Index No.) | CAS No.   | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH registration number |
|-------------------|--------------------|-----------|----------|-----------------------------------------------------------------|---------------------------|
| Hydrogen chloride | 231-595-7<br>( )   | 7647-01-0 | 3.3      | Press. Gas<br>Skin Corr. 1A (H314)<br>Acute Tox. 3 (H331)       | No data available         |

**Full text of H- and EUH-phrases: see section 16****SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation**

Remove to fresh air.

**Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Ingestion**

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

**Self-protection of the first aider**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

**4.2. Most important symptoms and effects, both acute and delayed****Most Important Symptoms and Effects**

Asthma-like and/ or skin allergy-like symptoms.

**4.3. Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**

Treat symptomatically

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

No information available

**5.2. Special hazards arising from the substance or mixture**

Thermal decomposition can lead to release of irritating gases and vapors

**5.3. Advice for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****Personal Precautions**

Ensure adequate ventilation.

Refer to protective measures listed in Sections 7 and 8.

**Advice for emergency responders**

Ensure adequate ventilation.

**6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. See Section 12 for additional Ecological Information.

**6.3. Methods and material for containment and cleaning up****Methods for Containment**

Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up**

Take up mechanically, placing in appropriate containers for disposal.

**6.4. Reference to other sections**

See Section 12: ECOLOGICAL INFORMATION.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Ensure adequate ventilation.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

**7.2. Conditions for safe storage, including any incompatibilities****Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place.

**7.3. Specific end use(s)****SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

| Chemical name                  | European Union                                                             | United Kingdom                                                                 | France                                                     | Spain                                                          | Germany DFG                                                  |                                                              |
|--------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| Hydrogen chloride<br>7647-01-0 | TWA: 5 ppm<br>TWA: 8 mg/m³<br>STEL: 10 ppm<br>STEL: 15 mg/m³               | TWA: 1 ppm<br>TWA: 2 mg/m³<br>STEL: 5 ppm<br>STEL: 8 mg/m³                     | STEL: 5 ppm<br>STEL: 7.6 mg/m³                             | TWA: 5 ppm<br>TWA: 7.6 mg/m³<br>STEL: 10 ppm<br>STEL: 15 mg/m³ | TWA: 2 ppm<br>TWA: 3.0 mg/m³<br>Peak: 4 ppm<br>Peak: 6 mg/m³ |                                                              |
| Chemical name                  | Italy MDLPS                                                                | Portugal                                                                       | Netherlands                                                | Finland                                                        | Denmark                                                      |                                                              |
| Hydrogen chloride<br>7647-01-0 | TWA: 5 ppm<br>TWA: 8 mg/m³<br>STEL: 10 ppm<br>STEL: 15 mg/m³               | TWA: 5 ppm<br>TWA: 8 mg/m³<br>STEL: 10 ppm<br>STEL: 15 mg/m³<br>Ceiling: 2 ppm | TWA: 8 mg/m³<br>STEL: 15 mg/m³                             | STEL: 5 ppm<br>STEL: 7.6 mg/m³                                 | Ceiling: 5 ppm<br>Ceiling: 8 mg/m³                           |                                                              |
| Chemical name                  | Sweden                                                                     | Austria                                                                        | Switzerland                                                | Poland                                                         | Norway                                                       | Ireland                                                      |
| Hydrogen chloride<br>7647-01-0 | LLV: 2 ppm<br>LLV: 3 mg/m³<br>Binding STLV: 4 ppm<br>Binding STLV: 6 mg/m³ | TWA: 5 ppm<br>TWA: 8 mg/m³<br>STEL 10 ppm<br>STEL 15 mg/m³                     | TWA: 2 ppm<br>TWA: 3 mg/m³<br>STEL: 4 ppm<br>STEL: 6 mg/m³ | TWA: 5 mg/m³<br>STEL: 10 mg/m³                                 | Ceiling: 5 ppm<br>Ceiling: 7 mg/m³                           | TWA: 8 mg/m³<br>TWA: 5 ppm<br>STEL: 10 ppm<br>STEL: 15 mg/m³ |

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration (PNEC)** No information available.

**8.2. Exposure controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).  
**Hand Protection** Impervious gloves.  
**Skin and Body Protection** Long sleeved clothing.

**Environmental Exposure Controls** Prevent product from entering drains.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

**Physical state** Liquid  
**Appearance** clear /COLORLESS  
**Odor** Slight chlorine

**pH - VALUE 1** No data available  
**Melting point / melting range** No data available  
**Initial boiling point and boiling range** 100 °C / 212 °F

**Flash Point** Not applicable  
**Vapor pressure @20 °C (kPa)** No data available

|                                        |                          |
|----------------------------------------|--------------------------|
| Relative vapor density                 | No data available        |
| Relative Density                       | No data available        |
| Specific gravity - VALUE 1             | No data available        |
| Water solubility                       | Miscible                 |
| Partition coefficient: n-octanol/water | No data available        |
| Autoignition temperature               | No data available        |
| Decomposition temperature              | No data available        |
| Dynamic viscosity - VALUE 1            | No data available        |
| Explosive properties                   | No information available |
| Oxidizing Properties                   | No information available |
| VOC content                            | No information available |

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

Stable under normal conditions.

#### Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

### 10.3. Possibility of hazardous reactions

#### **Hazardous polymerization**

None under normal processing.

#### **Hazardous Reactions**

None under normal processing.

### 10.4. Conditions to avoid

Heating can release hazardous gases.

### 10.5. Incompatible materials

Bases Cyanides

### 10.6. Hazardous decomposition products

Hydrogen chloride.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute Toxicity**

|                                   |                                                                                           |
|-----------------------------------|-------------------------------------------------------------------------------------------|
| <b><u>Product Information</u></b> | Product does not present an acute toxicity hazard based on known or supplied information. |
| <b>Inhalation</b>                 | No data available.                                                                        |
| <b>Eye Contact</b>                | No data available.                                                                        |
| <b>Skin Contact</b>               | No data available.                                                                        |
| <b>Ingestion</b>                  | No data available.                                                                        |

The following ATE values have been calculated for the mixture

|                                      |                |
|--------------------------------------|----------------|
| <b>ATEmix (oral)</b>                 | 7,212.12 mg/kg |
| <b>ATEmix (inhalation-gas)</b>       | 17,069.76 ppm  |
| <b>ATEmix (inhalation-dust/mist)</b> | 15.1818 mg/l   |
| <b>ATEmix (inhalation-vapor)</b>     | 90.909 mg/l    |

**Unknown acute toxicity**

0 % of the mixture consists of ingredient(s) of unknown acute toxicity.  
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.  
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

**Component Information**

|                                          |                           |
|------------------------------------------|---------------------------|
| <b>Skin corrosion/irritation</b>         | No information available. |
| <b>Serious eye damage/eye irritation</b> | No information available. |
| <b>Sensitization</b>                     | No information available. |
| <b>Mutagenic Effects</b>                 | No information available. |
| <b>Carcinogenic effects</b>              |                           |
| <b>Reproductive Toxicity</b>             | No information available. |
| <b>STOT - single exposure</b>            | No information available. |
| <b>STOT - repeated exposure</b>          | No information available. |
| <b>Aspiration hazard</b>                 | No information available. |

**SECTION 12: Ecological information****12.1. Toxicity**

Contains 0 % of components with unknown hazards to the aquatic environment

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

No information available.

### 12.4. Mobility in soil

#### **Mobility in soil**

No information available.

### 12.5. Results of PBT and vPvB assessment

No information available.

| Chemical name     | PBT and vPvB assessment |
|-------------------|-------------------------|
| Hydrogen chloride | Not PBT/vPvB            |

### 12.6. Other adverse effects

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|                                            |                                                                                                     |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Waste from Residues/Unused Products</b> | Dispose of in accordance with federal, state and local regulations.                                 |
| <b>Contaminated Packaging</b>              | Do not reuse empty containers.                                                                      |
| <b>Other information</b>                   | Waste codes should be assigned by the user based on the application for which the product was used. |

## SECTION 14: Transport information

### IMDG

|                                                                                                   |                                            |
|---------------------------------------------------------------------------------------------------|--------------------------------------------|
| 14.1. UN-No                                                                                       | UN3264                                     |
| 14.2. Proper shipping name                                                                        | Corrosive liquid, acidic, inorganic, n.o.s |
| 14.3. Transport hazard class(es)                                                                  | 8                                          |
| 14.4. Packing Group                                                                               | III                                        |
| Description                                                                                       | Not applicable                             |
| 14.5. Marine Pollutant                                                                            | None                                       |
| 14.6. Special Provisions                                                                          | None                                       |
| No information available Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | No information available                   |

### RID

|                                  |                                            |
|----------------------------------|--------------------------------------------|
| 14.1. UN-No                      | UN3264                                     |
| 14.2. Proper shipping name       | Corrosive liquid, acidic, inorganic, n.o.s |
| 14.3. Transport hazard class(es) | 8                                          |

|                            |                |
|----------------------------|----------------|
| 14.4. Packing Group        | III            |
| Description                | Not applicable |
| 14.5. Environmental hazard | None           |
| 14.6. Special Provisions   | None           |

**ADR**

|                                  |                                            |
|----------------------------------|--------------------------------------------|
| 14.1. UN-No                      | UN3264                                     |
| 14.2. Proper shipping name       | Corrosive liquid, acidic, inorganic, n.o.s |
| 14.3. Transport hazard class(es) | 8                                          |
| 14.4. Packing Group              | III                                        |
| Description                      | Not applicable                             |
| 14.5. Environmental hazard       | None                                       |
| 14.6. Special Provisions         | None                                       |

**ICAO**

|                            |                                            |
|----------------------------|--------------------------------------------|
| 14.1. UN-No                | UN3264                                     |
| 14.2. Proper Shipping Name | Corrosive liquid, acidic, inorganic, n.o.s |
| 14.3. Hazard Class         | 8                                          |
| 14.4. Packing Group        | III                                        |
| Description                | Not applicable                             |
| 14.5. Environmental hazard | None                                       |
| 14.6. Special Provisions   | None                                       |

**IATA-DGR**

|                                  |                                            |
|----------------------------------|--------------------------------------------|
| 14.1. UN-No                      | UN3264                                     |
| 14.2. Proper shipping name       | Corrosive liquid, acidic, inorganic, n.o.s |
| 14.3. Transport hazard class(es) | 8                                          |
| 14.4. Packing Group              | III                                        |
| Description                      | Not applicable                             |
| 14.5. Environmental hazard       | None                                       |
| 14.6. Special Provisions         | None                                       |

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

#### International Inventories

All of the components in the product are on the following Inventory lists: U.S.A. (TSCA), Europe (EINECS/ELINCS/NLP), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), China (IECSC), Australia (AICS), Korea (ECL).

|               |          |
|---------------|----------|
| TSCA          | Complies |
| EINECS/ELINCS | Complies |
| DSL/NDSL      | Complies |
| PICCS         | Complies |
| ENCS          | Complies |
| IECSC         | Complies |
| AIIC          | Complies |
| KECL          | Complies |

#### Legend

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances

### **15.2. Chemical safety assessment**

No information available

## **SECTION 16: Other information**

### **Full text of R-phrases referred to under sections 2 and 3**

No information available

### **Full text of any hazard and/or precautionary statements referred to under Sections 2-15**

H314 - Causes severe skin burns and eye damage  
H331 - Toxic if inhaled

**Revision date** 12-Nov-2025

**Reason for Revision** Not applicable.

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**End of Safety Data Sheet**