

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product Name** IV-ICPMS-71B

**Other means of identification**

**Product Description** 10 µg/mL: Ge, Hf, Mo, Nb, Sb, Si, Sn, Ta, Te, Ti, W, Zr

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Laboratory chemicals.

**Uses advised against** No information available

**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

**Emergency Telephone Number**

Chemtrec 1-800-424-9300 (North America)  
Chemtrec +1 703-741-5970 (International)

## 2. HAZARDS IDENTIFICATION

**GHS**

**Classification**

|                                   |            |
|-----------------------------------|------------|
| Skin corrosion/irritation         | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Corrosive to metals               | Category 1 |

**Label Elements**

**Danger**

**Hazard statements**

Causes skin irritation  
Causes serious eye damage  
May be corrosive to metals



**Appearance** clear/ colorless

**Physical state** Liquid

**Odor** Odorless

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Keep only in original container

**Precautionary Statements - Response****Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician

**Skin**

IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse

**Spill**

Absorb spillage to prevent material damage

**Precautionary Statements - Storage**

Store in corrosive resistant container with a resistant inner liner

**Hazards not otherwise classified (HNOC)****Other Information**

No information available

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical name | CAS No.   | Weight-% |
|---------------|-----------|----------|
| Nitric acid   | 7697-37-2 | 3        |

**4. FIRST AID MEASURES****Description of first aid measures**

|                     |                                                                                                                         |
|---------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Eye Contact</b>  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.<br>Consult a physician. |
| <b>Skin Contact</b> | Wash skin with soap and water.                                                                                          |
| <b>Inhalation</b>   | Remove to fresh air.                                                                                                    |
| <b>Ingestion</b>    | Clean mouth with water and drink afterwards plenty of water.                                                            |

**Most important symptoms and effects, both acute and delayed**

|                                            |                           |
|--------------------------------------------|---------------------------|
| <b>Most Important Symptoms and Effects</b> | No information available. |
|--------------------------------------------|---------------------------|

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

|                           |                       |
|---------------------------|-----------------------|
| <b>Notes to Physician</b> | Treat symptomatically |
|---------------------------|-----------------------|

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

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

**Unsuitable Extinguishing Media** Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

**Special Exposure Hazards Arising from the Substance/Mixture**

Thermal decomposition can lead to release of irritating gases and vapors

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective Equipment and Precautions for Firefighters**

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

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Ensure adequate ventilation.

**Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for Cleaning up** Dam up. Neutralise with lime milk; soda. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

**Precautions for safe handling****Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Products** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

| Chemical name            | ACGIH TLV                 | OSHA PEL                                                                                                                                                              | NIOSH IDLH                                                                                          |
|--------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Nitric acid<br>7697-37-2 | TWA: 2 ppm<br>STEL: 4 ppm | TWA: 2 ppm<br>TWA: 5 mg/m <sup>3</sup><br>(vacated) TWA: 2 ppm<br>(vacated) TWA: 5 mg/m <sup>3</sup><br>(vacated) STEL: 4 ppm<br>(vacated) STEL: 10 mg/m <sup>3</sup> | IDLH: 25 ppm<br>TWA: 2 ppm<br>TWA: 5 mg/m <sup>3</sup><br>STEL: 4 ppm<br>STEL: 10 mg/m <sup>3</sup> |

**Appropriate engineering controls**

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

**Individual protection measures, such as personal protective equipment**

|                               |                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Respiratory Protection</b> | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators |
| <b>Hygiene Measures</b>       | Handle in accordance with good industrial hygiene and safety practice.                                          |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                                |                          |
|------------------------------------------------|--------------------------|
| <b>Physical state</b>                          | Liquid                   |
| <b>Appearance</b>                              | clear/ colorless         |
| <b>Odor</b>                                    | Odorless                 |
| <b>pH - VALUE 1</b>                            | No data available        |
| <b>Melting point / melting range</b>           | No data available        |
| <b>Initial boiling point and boiling range</b> | 100 °C / 212 °F          |
| <b>Evaporation rate</b>                        | No data available        |
| <b>Flammability (solid, gas)</b>               | No data available        |
| <b>Vapor pressure @20 °C (kPa)</b>             | No data available        |
| <b>Relative vapor density</b>                  | No data available        |
| <b>Relative Density</b>                        | No data available        |
| <b>Specific gravity - VALUE 1</b>              | No data available        |
| <b>Water solubility</b>                        | Miscible                 |
| <b>Partition coefficient: n-octanol/water</b>  | No data available        |
| <b>Autoignition temperature</b>                | No data available        |
| <b>Decomposition temperature</b>               | No data available        |
| <b>Dynamic viscosity - VALUE 1</b>             | No data available        |
| <b>Explosive Properties</b>                    | No information available |
| <b>Oxidizing Properties</b>                    | No information available |
| <b>VOC content</b>                             | No information available |

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

**Hazardous Polymerization** None under normal processing.

### Conditions to Avoid

None known.

### Incompatible materials

Bases Cyanides

### Hazardous decomposition products

Nitrogen oxides (NOx). Hydrogen fluoride.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Product Information** Product does not present an acute toxicity hazard based on known information

**Inhalation** No data available.

**Eye Contact** No data available.

**Skin Contact** No data available.

**Ingestion** No data available.

**Component Information**

| Chemical name           | Oral LD50 | Dermal LD50 | Inhalation LC50      |
|-------------------------|-----------|-------------|----------------------|
| Nitric acid - 7697-37-2 | -         | -           | = 2500 ppm (Rat) 1 h |

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Carcinogenic effects**

| Chemical name            | ACGIH | IARC                | NTP | OSHA |
|--------------------------|-------|---------------------|-----|------|
| Nitric acid<br>7697-37-2 |       | Group 1<br>Group 2A |     | X    |

**Reproductive Toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (inhalation-dust/mist) 16.7 mg/l

ATEmix (inhalation-vapor) 107.4 mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Ecotoxicity effects**

Contains 1E-05 % of components with unknown hazards to the aquatic environment

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

| Chemical name            | Partition coefficient |
|--------------------------|-----------------------|
| Nitric acid<br>7697-37-2 | -2.3                  |

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Waste from Residues/Unused** Dispose of in accordance with federal, state and local regulations

**Products****Contaminated Packaging**

Do not reuse empty containers.

| Chemical name            | California Hazardous Waste Status |
|--------------------------|-----------------------------------|
| Nitric acid<br>7697-37-2 | Toxic<br>Corrosive<br>Ignitable   |

**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

## 15. REGULATORY INFORMATION

### International Inventories

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

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical name           | CAS No.   | Weight-% | SARA 313 - Threshold Values % |
|-------------------------|-----------|----------|-------------------------------|
| Nitric acid - 7697-37-2 | 7697-37-2 | 3        | 1.0                           |

#### SARA 311/312 Hazard Categories

|                                   |                |
|-----------------------------------|----------------|
| Acute health hazard               | No             |
| Chronic Health Hazard             | Not classified |
| Fire hazard                       | No             |
| Sudden Release of Pressure Hazard | No             |
| Reactive Hazard                   | No             |

#### Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical name            | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|--------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Nitric acid<br>7697-37-2 | 1000 lb                     |                        |                           | X                          |

#### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical name            | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ                                        |
|--------------------------|--------------------------|------------------------------------|-------------------------------------------|
| Nitric acid<br>7697-37-2 | 1000 lb                  | 1000 lb                            | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

| Chemical name            | New Jersey | Massachusetts | Pennsylvania |
|--------------------------|------------|---------------|--------------|
| Nitric acid<br>7697-37-2 | X          | X             | X            |

**U.S. EPA Label Information****16. OTHER INFORMATION**

Revision Date 12-Sep-2025

**Revision Note**

No information available

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS