

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 01/09/2024

Version Number 1

Reviewed on 01/09/2024

### 1 Identification

- **Product identifier**
- **Trade name:** ICP-MS Internal Std Mix (100mL)
- **Part number:** 5191-4570
- **Application of the substance / the mixture** Reagents and Standards for Analytical Chemical Laboratory Use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Agilent Technologies, Inc.  
5301 Stevens Creek Blvd.  
Santa Clara, CA 95051 USA
- **Information department:**  
Telephone: 800-227-9770  
e-mail: [pdl-msds\\_author@agilent.com](mailto:pdl-msds_author@agilent.com)
- **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

### 2 Hazard identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity - Category 1A     H350 May cause cancer.



GHS05 Corrosion

Skin Corrosion - Category 1A     H314 Causes severe skin burns and eye damage.

Serious Eye Damage - Category 1     H318 Causes serious eye damage.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
nitric acid  
acetic acid beryllium salt
- **Hazard statements**  
H314 Causes severe skin burns and eye damage.  
H350 May cause cancer.
- **Precautionary statements**  
P101                      If medical advice is needed, have product container or label at hand.  
P102                      Keep out of reach of children.  
P103                      Read label before use.  
P201                      Obtain special instructions before use.

(Contd. on page 2)

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 01/09/2024

Version Number 1

Reviewed on 01/09/2024

**Trade name: ICP-MS Internal Std Mix (100mL)**

(Contd. of page 1)

- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P264 Wash thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 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/doctor.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P321 Specific treatment (see on this label).
- P363 Wash contaminated clothing before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



### 3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

7697-37-2	nitric acid	9.8900% w/w
543-81-7	acetic acid beryllium salt	0.1128% w/w

### 4 First-aid measures

· **Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 01/09/2024

Version Number 1

Reviewed on 01/09/2024

**Trade name: ICP-MS Internal Std Mix (100mL)**

- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

(Contd. of page 2)

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

CA

(Contd. on page 4)

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 01/09/2024

Version Number 1

Reviewed on 01/09/2024

**Trade name: ICP-MS Internal Std Mix (100mL)**

(Contd. of page 3)

### 8 Exposure controls/ Personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**7697-37-2 nitric acid**

EL	STEL: 4 ppm TWA: 2 ppm
EV	STEL: 10 mg/m <sup>3</sup> , 4 ppm TWA: 5 mg/m <sup>3</sup> , 2 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.

Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device/equipment with appropriate organic or acid gas cartridge.

· **Protection of hands:**

Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

· **Material of gloves**

For normal use: nitrile rubber, 11-13 mil thickness

For direct contact with the chemical: butyl rubber, 12-15 mil thickness

· **Penetration time of glove material**

For normal use: nitrile rubber: 1 hour

For direct contact with the chemical: butyl rubber: >4 hours

· **Eye protection:**



Tightly sealed goggles

CA

(Contd. on page 5)



## Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/09/2024

Version Number 1

Reviewed on 01/09/2024

Trade name: ICP-MS Internal Std Mix (100mL)

(Contd. of page 4)

### 9 Physical and chemical properties

**· Information on basic physical and chemical properties****· General Information****· Appearance:**

**Form:** Fluid  
**Color:** According to product specification

**· Odor:** Characteristic

**· Odor threshold:** Not determined.

**· pH-value:** Not determined.

**· Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 83 °C

**· Flash point:** Not applicable.

**· Flammability (solid, gaseous):** Not applicable.

**· Decomposition temperature:** Not determined.

**· Auto igniting:** Product is not selfigniting.

**· Danger of explosion:** Product does not present an explosion hazard.

**· Explosion limits:**

**Lower:** Not determined.

**Upper:** Not determined.

**· Vapor pressure at 20 °C:** 23 hPa

**· Density:** Not determined.

**· Relative density** Not determined.

**· Vapor density** Not determined.

**· Evaporation rate** Not determined.

**· Solubility in / Miscibility with**

**Water:** Fully miscible.

**· Partition coefficient (n-octanol/water):** Not determined.

**· Viscosity:**

**Dynamic:** Not determined.

**Kinematic:** Not determined.

**· Solvent content:**

**Water:** 89.0 %

**Solids content:** 0.2 %

**· Other information** No further relevant information available.

### 10 Stability and reactivity

**· Reactivity** No further relevant information available.

**· Chemical stability**

**· Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**· Possibility of hazardous reactions** No dangerous reactions known.

(Contd. on page 6)

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 01/09/2024

Version Number 1

Reviewed on 01/09/2024

**Trade name: ICP-MS Internal Std Mix (100mL)**

(Contd. of page 5)

- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· <b>LD/LC50 values that are relevant for classification:</b>		
<b>7697-37-2 nitric acid</b>		
Inhalative	LC50/4 h	67 mg/L (rat)

- **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.

- **on the eye:**

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

· <b>IARC (International Agency for Research on Cancer)</b>		
7647-01-0	hydrochloric acid	3
543-81-7	acetic acid beryllium salt	1

· <b>NTP (National Toxicology Program)</b>		
543-81-7	acetic acid beryllium salt	K

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

(Contd. on page 7)

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 01/09/2024

Version Number 1

Reviewed on 01/09/2024

**Trade name: ICP-MS Internal Std Mix (100mL)**



· **Other adverse effects** No further relevant information available.

(Contd. of page 6)

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- |  |   |
|--|---|
| · <b>UN-Number</b>                                   |   |
| · <b>DOT/TDG, ADR, IMDG, IATA</b>                    | UN3264  |
| · <b>UN proper shipping name</b>                     |   |
| · <b>DOT/TDG</b>                                     | Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid)                           |
| · <b>ADR</b>   | 3264 Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid)                      |
| · <b>IMDG, IATA</b>                                  | CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID)                           |
| · <b>Transport hazard class(es)</b>                  |   |
| · <b>DOT/TDG (Transport dangerous goods):</b>        |   |
|  |  |
| · <b>Class</b>                                       | 8 Corrosive substances  |
| · <b>Label</b>                                       | 8   |
|  |   |
| · <b>ADR, IMDG, IATA</b>                             |   |
|  |  |
| · <b>Class</b>                                       | 8 Corrosive substances  |
| · <b>Label</b>                                       | 8   |
| · <b>Packing group</b>                               |   |
| · <b>DOT/TDG, ADR, IMDG, IATA</b>                    | III   |
| · <b>Environmental hazards:</b>                      | Not applicable.   |
| · <b>Special precautions for user</b>                | Warning: Corrosive substances   |
| · <b>Hazard identification number (Kemler code):</b> | 80  |
| · <b>EMS Number:</b>                                 | F-A,S-B   |
| · <b>Segregation groups</b>                          | (SGG1) Acids  |
| · <b>Stowage Category</b>                            | B   |

(Contd. on page 8)

## Safety Data Sheet

### according to HPR, Schedule 1

Printing date 01/09/2024

Version Number 1

Reviewed on 01/09/2024

**Trade name: ICP-MS Internal Std Mix (100mL)**

(Contd. of page 7)

· <b>Stowage Code</b>	SW2 Clear of living quarters.
· <b>Segregation Code</b>	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>DOT/TDG</b>	
· <b>Quantity limitations</b>	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· <b>ADR</b>	
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID), 8, III

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

### · **Section 355 (extremely hazardous substances):**

7697-37-2	nitric acid
7647-01-0	hydrochloric acid

### · **Section 313 (Specific toxic chemical listings):**

7697-37-2	nitric acid
7647-01-0	hydrochloric acid
543-81-7	acetic acid beryllium salt

### · **TSCA (Toxic Substances Control Act):**

7732-18-5	water	ACTIVE
7697-37-2	nitric acid	ACTIVE
7647-01-0	hydrochloric acid	ACTIVE
10049-07-7	rhodium trichloride	ACTIVE
12060-08-1	scandium oxide	ACTIVE
7440-27-9	terbium	ACTIVE
7440-69-9	bismuth	ACTIVE
7440-74-6	indium	ACTIVE

(Contd. on page 9)



# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 01/09/2024

Version Number 1

Reviewed on 01/09/2024

**Trade name: ICP-MS Internal Std Mix (100mL)**

(Contd. of page 8)

**· Canadian substance listings:****· Canadian Domestic Substances List (DSL)**

7732-18-5	water
7697-37-2	nitric acid
7647-01-0	hydrochloric acid
10049-07-7	rhodium trichloride
12060-08-1	scandium oxide
7440-69-9	bismuth
7440-74-6	indium

**· Canadian Non-Domestic Substances List (NDSL)**

7440-27-9	terbium
-----------	---------

**· Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

**· Canadian Ingredient Disclosure list (limit 1%)**

7697-37-2	nitric acid
-----------	-------------

**· National regulations:****· Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.  
Exceptions can be made by the authorities in certain cases.

**· Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation.  
No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

**· Contact:****· Date of the latest revision of the safety data sheet** 01/09/2024**· Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative