



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
WHS Regulations

Revision date 22-Nov-2024

Revision Number 1

## Section 1: Identification: Product identifier and chemical identity

### Product identifier

**Product Name** ICP-MS Stock Tuning Solution

**Product Code(s)** 5188-6564

### Other means of identification

**Proper shipping name** Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)

**Chemical name**  
**Pure substance/mixture** Mixture

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

**Recommended use** Reagents and Standards for Analytical Chemical Laboratory Use.

**Uses advised against** No information available.

**Chemicals of Security Concern** This product contains one or more substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

### Details of manufacturer or importer

#### Supplier

Agilent Technologies Australia Pty Ltd  
679 Springvale Road  
Mulgrave  
Victoria 3170, Australia

1800 802 402

For further information, please contact

**Contact Point** Product Safety Department

**E-mail address** pdl-msds\_author@agilent.com

### Emergency telephone number

**Emergency telephone number** CHEMTREC®: +(61)-290372994

## Section 2: Hazard(s) identification

# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

**GHS Classification**

<b>Corrosive to metals</b>	Category 1
<b>Skin corrosion/irritation</b>	Category 2
<b>Serious eye damage/eye irritation</b>	Category 2

**Label elements**

Corrosion


**Signal word**

WARNING

**Hazard statements**

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

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling.  
 Keep only in original packaging.  
 Wear protective gloves/clothing and eye/face protection.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 If eye irritation persists: Get medical advice/attention.  
 IF ON SKIN: Wash with plenty of water and soap.  
 If skin irritation occurs: Get medical advice/attention.  
 Take off contaminated clothing and wash it before reuse.  
 Absorb spillage to prevent material damage.

**Precautionary Statements - Storage**

Store in corrosion resistant container with a resistant inner liner.

**Other hazards which do not result in classification**

No information available.

## Section 3: Composition/information on ingredients

Chemical name	CAS No.	Weight-%
Nitric Acid	7697-37-2	0 - 10%
Non-hazardous ingredients	Proprietary	Balance

**Additional information**

The concentration of the acid stated in this SDS is calculated as an absolute mass concentration (%w/v). This is less than the acid concentration stated on the product label and COA, which reflects a percent value of the commercially available concentrated aqueous form of the acid.

## Section 4: First aid measures

# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

## Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Emergency telephone number</b>	Poisons Information Centre, Australia: 13 11 26 Poisons Information Centre, New Zealand: 0800 764 766
<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

**Symptoms** May cause redness and tearing of the eyes. Burning sensation.

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

**Note to doctors** Treat symptomatically.

## **Section 5: Firefighting measures**

### Suitable Extinguishing Media

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

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

### Specific hazards arising from the chemical

**Specific hazards arising from the chemical** No information available.

### Special protective actions for firefighters

**Special protective equipment and** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

**precautions for fire-fighters** Use personal protection equipment.

**Hazchem code** 2X

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

### Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

### Precautions to prevent secondary hazards

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## Section 7: Handling and storage, including how the chemical may be safely used

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before re-use.

**General hygiene considerations** Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials. Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA.

**Incompatible materials** Oxidising agent. Strong acids. Strong bases.

# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

## Section 8: Exposure controls and personal protection

### Control parameters

#### Exposure Limits

Chemical name	Australia	New Zealand	ACGIH TLV
Nitric Acid 7697-37-2	TWA: 2 ppm TWA: 5.2 mg/m <sup>3</sup> STEL: 4 ppm STEL: 10 mg/m <sup>3</sup>	TWA: 2 ppm TWA: 5.2 mg/m <sup>3</sup> STEL: 4 ppm STEL: 10 mg/m <sup>3</sup>	TWA: 2 ppm STEL: 4 ppm

Chemical name	European Union	United Kingdom	Germany DFG
Nitric Acid 7697-37-2	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	-

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

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

**Eye/face protection** If splashes are likely to occur, wear safety glasses with side-shields. Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

**Skin and body protection** Long sleeved clothing. Wear suitable protective clothing.

**Hand protection** Wear protective Neoprene™ gloves. Wear suitable gloves. Impervious gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

**Respiratory protection** Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

**Thermal hazards** No information available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

**Physical state** Liquid  
**Appearance** Liquid



# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

Colour colourless  
Odour Odourless.  
Odour threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapour pressure	No data available	None known
Relative vapour density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Auto-ignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

## Other information

VOC content No information available  
Particle characteristics No information available

## **Section 10: Stability and reactivity**

### Reactivity

Reactivity No information available.

### Chemical stability

Stability Stable under normal conditions.

### Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

### Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

### Conditions to avoid

# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

**Conditions to avoid** Exposure to air or moisture over prolonged periods.

**Incompatible materials**

**Incompatible materials** Oxidising agent. Strong acids. Strong bases.

**Hazardous decomposition products**

**Hazardous decomposition products** None known based on information supplied.

**Section 11: Toxicological information**

**Information on likely routes of exposure**

**Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

**Skin contact** Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

**Symptoms** Redness. May cause redness and tearing of the eyes.

**Acute toxicity**

**Numerical measures of toxicity - Product Information**

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

ATEmix (oral) 99,999.00 mg/kg  
 ATEmix (dermal) 99,999.00 mg/kg  
 ATEmix (inhalation-gas) 99,999.00 ppm  
 ATEmix (inhalation-vapour) 157.90 mg/l  
 ATEmix (inhalation-dust/mist) 99,999.00 mg/l

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Nitric Acid	-	-	= 2500 ppm ( Rat ) 1 h ATE (vapours) = 2.65 mg/L

See section 16 for terms and abbreviations

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

# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye irritation.
<b>Respiratory or skin sensitisation</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	Contains a known or suspected carcinogen.
<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

### Ecotoxicity

#### **Aquatic ecotoxicity**

**Unknown aquatic toxicity** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

**Terrestrial ecotoxicity** There is no data for this product.

### Persistence and degradability

**Persistence and degradability** No information available.

### Bioaccumulative potential

**Bioaccumulation**

# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

**Component Information**

Chemical name	Partition coefficient
Nitric Acid	-2.3

**Mobility**
**Mobility** No information available.

**Other adverse effects**
**Other adverse effects** No information available.

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

Chemical name	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very High Concern (SVHC) for Authorisation	EU - REACH (1907/2006) - Endocrine Disruptor Assessment List of Substances
Nitric Acid	-	-

## Section 13: Disposal considerations

**Disposal methods**
**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not re-use empty containers.

See section 8 for more information

## Section 14: Transport information

**ADG**

**UN number or ID number** UN3264  
**Proper shipping name** Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)  
**Transport hazard class(es)** 8  
**Packing group** III  
**Environmental hazard** No  
**Special Provisions** 223, 274  
**Description** UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III  
**Limited quantity (LQ)** 5 L  
**Hazchem code** 2X

**IATA**

**UN number or ID number** UN3264  
**UN proper shipping name** Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)  
**Transport hazard class(es)** 8  
**Packing group** III  
**ERG Code** 8L  
**Special Provisions** A3, A803  
**Description** UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III

# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

**IMDG**

**UN number or ID number** UN3264  
**UN proper shipping name** Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)  
**Transport hazard class(es)** 8  
**Packing group** III  
**EmS-No.** F-A, S-B  
**Special Provisions** 223, 274  
**Marine pollutant** NP  
**Description** UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

No information available

## Section 15: Regulatory information

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

**National regulations**

**Australia**

See section 8 for national exposure control parameters

**Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)**

Classified as a scheduled poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

**Poison Schedule Number** 7

**Australian Industrial Chemicals Introduction Scheme (AICIS)**

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Nitric Acid - 7697-37-2	Contact supplier for inventory compliance status Present	-
Lithium carbonate - 554-13-2	Present	-
Thallium - 7440-28-0	Contact supplier for inventory compliance status Present	-
Cobalt - 7440-48-4	Present	-

**Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

**Chemicals of Security Concern**

# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

This product contains one or more substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

Chemical name	Chemicals of Security Concern	Additional information
Nitric Acid - 7697-37-2	Present High risk	Precursors to homemade explosives

**National pollutant inventory**

Subject to reporting requirement

Chemical name	National pollutant inventory
Nitric Acid - 7697-37-2	10 tonne/yr Threshold category 1

**International Inventories**

<b>AIC</b>	Contact supplier for inventory compliance status.
<b>NZIoC</b>	Contact supplier for inventory compliance status.
<b>TSCA</b>	LGC, to the best of its ability, has confirmed that the chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb 2019, as amended Feb 2021."
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.

**Legend:**

- AICS** - Australian Inventory of Chemical Substances
- NZIoC** - New Zealand Inventory of Chemicals
- 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 Chemical Substances/European 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

**International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

**Section 16: Any other relevant information**



# SAFETY DATA SHEET

5188-6564 - ICP-MS Stock Tuning Solution

Revision date 22-Nov-2024

Revision date 22-Nov-2024

## Revision Note

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

## Key or legend to abbreviations and acronyms used in the safety data sheet

### Legend

SVHC: Substances of Very High Concern for Authorisation:  
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances  
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances  
STOT: Specific Target Organ Toxicity  
ATE: Acute Toxicity Estimate  
LC50: 50% Lethal Concentration  
LD50: 50% Lethal Dose

### Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation
C	Carcinogen		

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
Australian Industrial Chemicals Introduction Scheme (AICIS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Program  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

### Disclaimer

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.

**End of Safety Data Sheet**