Conforms to Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals

SAFETY DATA SHEET

Agilent Technologies

7500 Series PA Tuning Solution Set, Part Number 5188-6524

Section 1. Identification

Product identifier : 7500 Series PA Tuning Solution Set, Part Number 5188-6524

Part no. (chemical kit) : 5188-6524

Part no. : 7500 Series PA Tuning 1 5188-6524-1
7500 Series PA Tuning 2 5188-6524-2

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Reagents and Standards for Analytical Chemistry Laboratory Use
7500 Series PA Tuning 1 100 ml
7500 Series PA Tuning 2 100 ml

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
679 Springvale Road
Mulgrave
Victoria 3170, Australia
1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture

7500 Series PA Tuning 1

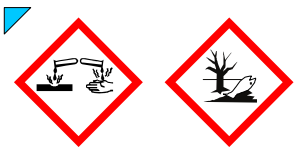
H290	CORROSIVE TO METALS - Category 1
H314	SKIN CORROSION/IRRITATION - Category 1
H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
H411	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

7500 Series PA Tuning 2

H290	CORROSIVE TO METALS - Category 1
H331	ACUTE TOXICITY (inhalation) - Category 3
H314	SKIN CORROSION/IRRITATION - Category 1
H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

GHS label elements

Hazard pictograms : 7500 Series PA Tuning 1



7500 Series PA Tuning 2

Signal word : 7500 Series PA Tuning 1 DANGER
7500 Series PA Tuning 2 DANGER

Section 2. Hazard(s) identification

Hazard statements :
7500 Series PA Tuning 1: H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage. H411 - Toxic to aquatic life with long lasting effects.
7500 Series PA Tuning 2: H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage. H331 - Toxic if inhaled.

Precautionary statements

Prevention :
7500 Series PA Tuning 1: P280 - Wear protective gloves, protective clothing and eye or face protection. P273 - Avoid release to the environment.
7500 Series PA Tuning 2: P280 - Wear protective gloves, protective clothing and eye or face protection.

Response :
7500 Series PA Tuning 1: P391 - Collect spillage. P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor. P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
7500 Series PA Tuning 2: P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor. P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.

Storage :
7500 Series PA Tuning 1: Not applicable.
7500 Series PA Tuning 2: Not applicable.

Disposal :
7500 Series PA Tuning 1: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
7500 Series PA Tuning 2: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

Additional warning phrases :
7500 Series PA Tuning 1: Not applicable.
7500 Series PA Tuning 2: Not applicable.

Other hazards which do not result in classification :
7500 Series PA Tuning 1: Causes digestive tract burns.
7500 Series PA Tuning 2: Causes digestive tract burns.

Section 3. Composition and ingredient information

Substance/mixture :
7500 Series PA Tuning 1: Mixture
7500 Series PA Tuning 2: Mixture

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
7500 Series PA Tuning 1		
nitric acid	≤10	7697-37-2
Cadmium	<0.0025	7440-43-9
7500 Series PA Tuning 2		
Hydrochloric acid	≥10 - <20	7647-01-0
nitric acid	≤3	7697-37-2

Section 3. Composition and ingredient information

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: 7500 Series PA Tuning 1

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

7500 Series PA Tuning 2

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

: 7500 Series PA Tuning 1

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

7500 Series PA Tuning 2

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Section 4. First aid measures

Skin contact

: 7500 Series PA Tuning 1 — Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

7500 Series PA Tuning 2 — Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: 7500 Series PA Tuning 1 — Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

7500 Series PA Tuning 2 — Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

: 7500 Series PA Tuning 1 — Causes serious eye damage.

7500 Series PA Tuning 2 — Causes serious eye damage.

Inhalation

: 7500 Series PA Tuning 1 — No known significant effects or critical hazards.

7500 Series PA Tuning 2 — Toxic if inhaled.

Skin contact

: 7500 Series PA Tuning 1 — Causes severe burns.

7500 Series PA Tuning 2 — Causes severe burns.

Ingestion

: 7500 Series PA Tuning 1 — Corrosive to the digestive tract. Causes burns.

7500 Series PA Tuning 2 — Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

Section 4. First aid measures

Eye contact	:	7500 Series PA Tuning 1	Adverse symptoms may include the following: pain watering redness
		7500 Series PA Tuning 2	Adverse symptoms may include the following: pain watering redness
Inhalation	:	7500 Series PA Tuning 1	No specific data.
		7500 Series PA Tuning 2	No specific data.
Skin contact	:	7500 Series PA Tuning 1	Adverse symptoms may include the following: pain or irritation redness blistering may occur
		7500 Series PA Tuning 2	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	:	7500 Series PA Tuning 1	Adverse symptoms may include the following: stomach pains
		7500 Series PA Tuning 2	Adverse symptoms may include the following: stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	:	7500 Series PA Tuning 1	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
		7500 Series PA Tuning 2	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	:	7500 Series PA Tuning 1	No specific treatment.
		7500 Series PA Tuning 2	No specific treatment.
Protection of first-aiders	:	7500 Series PA Tuning 1	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
		7500 Series PA Tuning 2	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media

: 7500 Series PA Tuning 1 — Use an extinguishing agent suitable for the surrounding fire.

7500 Series PA Tuning 2 — Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: 7500 Series PA Tuning 1 — None known.

7500 Series PA Tuning 2 — None known.

Specific hazards arising from the chemical

: 7500 Series PA Tuning 1 — In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

7500 Series PA Tuning 2 — In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

: 7500 Series PA Tuning 1 — Decomposition products may include the following materials:
nitrogen oxides

7500 Series PA Tuning 2 — Decomposition products may include the following materials:
nitrogen oxides
halogenated compounds

Special protective actions for fire-fighters

: 7500 Series PA Tuning 1 — Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

7500 Series PA Tuning 2 — Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

: 7500 Series PA Tuning 1 — Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

7500 Series PA Tuning 2 — Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Hazchem code

: 7500 Series PA Tuning 1 — 2X

7500 Series PA Tuning 2 — 2X

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: 7500 Series PA Tuning 1 — No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

7500 Series PA Tuning 2 — No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate

Section 6. Accidental release measures

respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : 7500 Series PA Tuning 1 — If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

7500 Series PA Tuning 2 — If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : 7500 Series PA Tuning 1 — Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

7500 Series PA Tuning 2 — Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up : 7500 Series PA Tuning 1 — Stop leak if without risk. Move containers from spill area. The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.

7500 Series PA Tuning 2 — Stop leak if without risk. Move containers from spill area. The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : 7500 Series PA Tuning 1 — Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

7500 Series PA Tuning 2 — Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from

Section 7. Handling and storage

alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

Advice on general occupational hygiene

: 7500 Series PA Tuning 1

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7500 Series PA Tuning 2

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: 7500 Series PA Tuning 1

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in corrosive resistant container with a resistant inner liner. Store locked up. Separate from alkalis. Keep away from metals. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7500 Series PA Tuning 2

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in corrosive resistant container with a resistant inner liner. Store locked up. Separate from alkalis. Keep away from metals. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
7500 Series PA Tuning 1	
nitric acid	**Safe Work Australia (Australia, 10/2022).** STEL: 10 mg/m³ 15 minutes. STEL: 4 ppm 15 minutes. TWA: 5.2 mg/m³ 8 hours. TWA: 2 ppm 8 hours.
Cadmium	**Safe Work Australia (Australia, 10/2022). [Cadmium and compounds]**

Section 8. Exposure controls and personal protection

	TWA: 0.01 mg/m³, (as Cd) 8 hours.
7500 Series PA Tuning 2	
Hydrochloric acid	**Safe Work Australia (Australia, 10/2022).** PEAK: 5 ppm PEAK: 7.5 mg/m³
nitric acid	**Safe Work Australia (Australia, 10/2022).** STEL: 10 mg/m³ 15 minutes. STEL: 4 ppm 15 minutes. TWA: 5.2 mg/m³ 8 hours. TWA: 2 ppm 8 hours.

Biological exposure indices

Ingredient name	Exposure indices
7500 Series PA Tuning 1	
Cadmium	**Safe Work Australia (Australia, 8/2023) [cadmium]** BEI Removal: 300 µg/g_C, β2-microglobulin [in urine]. Sampling time: spot creatinine corrected urine should be repeated every 180 days until the level falls below. BEI Removal: 5 µg/g_C, cadmium [in urine]. Sampling time: spot creatinine corrected urine should be repeated every 180 days until the level falls below. BEI Removal: 1500 µg/g_C, β2-microglobulin [in urine]. BEI Removal: 10 µg/g_C, cadmium [in urine]. BEI Action level: 5 µg/g_C, cadmium [in urine]. BEI Base level: 5 µg/g_C, cadmium [in urine]. Sampling time: spot creatinine corrected urine to be conducted annually. BEI Surveillance: 5 µg/g_C, cadmium [in urine].

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Section 8. Exposure controls and personal protection

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : 7500 Series PA Tuning 1 Liquid.
7500 Series PA Tuning 2 Liquid.

Colour : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Odour : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Odour threshold : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

pH : 7500 Series PA Tuning 1 <2
7500 Series PA Tuning 2 <2

Melting point/freezing point : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Boiling point, initial boiling point, and boiling range : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Flash point : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Evaporation rate : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Flammability : 7500 Series PA Tuning 1 Not applicable.
7500 Series PA Tuning 2 Not applicable.

Lower and upper explosion limit/flammability limit : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Vapour pressure :

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method

Section 9. Physical and chemical properties and safety characteristics

7500 Series PA Tuning 1						
nitric acid	48.0039	6.4	-	-	-	-
water	17.5	2.3	-	92.258	12.3	-
7500 Series PA Tuning 2						
nitric acid	48.0039	6.4	-	-	-	-
water	17.5	2.3	-	92.258	12.3	-

Relative vapour density : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Relative density : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Solubility(ies) :

Media	Result
7500 Series PA Tuning 1	
water	Soluble
7500 Series PA Tuning 2	
water	Soluble

Partition coefficient: n-octanol/water : 7500 Series PA Tuning 1 Not applicable.
7500 Series PA Tuning 2 Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Viscosity : 7500 Series PA Tuning 1 Not available.
7500 Series PA Tuning 2 Not available.

Particle characteristics

Median particle size : 7500 Series PA Tuning 1 Not applicable.
7500 Series PA Tuning 2 Not applicable.

Section 10. Stability and reactivity

Reactivity : 7500 Series PA Tuning 1 No specific test data related to reactivity available for this product or its ingredients.
7500 Series PA Tuning 2 No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : 7500 Series PA Tuning 1 The product is stable.
7500 Series PA Tuning 2 The product is stable.

Possibility of hazardous reactions : 7500 Series PA Tuning 1 Under normal conditions of storage and use, hazardous reactions will not occur.
7500 Series PA Tuning 2 Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : 7500 Series PA Tuning 1 No specific data.
7500 Series PA Tuning 2 No specific data.

Section 10. Stability and reactivity

Incompatible materials : 7500 Series PA Tuning 1 — Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.
Reactive or incompatible with the following materials:
alkalis
metals

7500 Series PA Tuning 2 — Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air.
Reactive or incompatible with the following materials:
alkalis
metals

Hazardous decomposition products : 7500 Series PA Tuning 1 — Under normal conditions of storage and use, hazardous decomposition products should not be produced.

7500 Series PA Tuning 2 — Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
7500 Series PA Tuning 1				
nitric acid	LC50 Inhalation Vapour	Rat	2500 ppm	1 hours
	LC50 Inhalation Vapour	Rat	130 mg/m³	4 hours
Cadmium	LD50 Oral	Rat	225 mg/kg	-
7500 Series PA Tuning 2				
Hydrochloric acid	LC50 Inhalation Gas.	Rat	3124 ppm	1 hours
nitric acid	LC50 Inhalation Vapour	Rat	2500 ppm	1 hours
	LC50 Inhalation Vapour	Rat	130 mg/m³	4 hours

Irritation/Corrosion

Not available.

Sensitisation

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
7500 Series PA Tuning 2 Hydrochloric acid	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
7500 Series PA Tuning 1 Cadmium	Category 1	-	-

Aspiration hazard

Not available.

Information on likely routes of exposure

7500 Series PA Tuning 1	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
7500 Series PA Tuning 2	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact

7500 Series PA Tuning 1	Causes serious eye damage.
7500 Series PA Tuning 2	Causes serious eye damage.

Inhalation

7500 Series PA Tuning 1	No known significant effects or critical hazards.
7500 Series PA Tuning 2	Toxic if inhaled.

Skin contact

7500 Series PA Tuning 1	Causes severe burns.
7500 Series PA Tuning 2	Causes severe burns.

Ingestion

7500 Series PA Tuning 1	Corrosive to the digestive tract. Causes burns.
7500 Series PA Tuning 2	Corrosive to the digestive tract. Causes burns.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

7500 Series PA Tuning 1	Adverse symptoms may include the following: pain watering redness
7500 Series PA Tuning 2	Adverse symptoms may include the following: pain watering redness

Inhalation

7500 Series PA Tuning 1	No specific data.
7500 Series PA Tuning 2	No specific data.

Skin contact

7500 Series PA Tuning 1	Adverse symptoms may include the following: pain or irritation redness blistering may occur
7500 Series PA Tuning 2	Adverse symptoms may include the following: pain or irritation redness blistering may occur

Ingestion

7500 Series PA Tuning 1	Adverse symptoms may include the following: stomach pains
7500 Series PA Tuning 2	Adverse symptoms may include the following: stomach pains

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Section 11. Toxicological information

Potential chronic health effects

General	:	7500 Series PA Tuning 1	No known significant effects or critical hazards.
		7500 Series PA Tuning 2	No known significant effects or critical hazards.
Carcinogenicity	:	7500 Series PA Tuning 1	No known significant effects or critical hazards.
		7500 Series PA Tuning 2	No known significant effects or critical hazards.
Mutagenicity	:	7500 Series PA Tuning 1	No known significant effects or critical hazards.
		7500 Series PA Tuning 2	No known significant effects or critical hazards.
Reproductive toxicity	:	7500 Series PA Tuning 1	No known significant effects or critical hazards.
		7500 Series PA Tuning 2	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
7500 Series PA Tuning 1					
7500 Series PA Tuning 1	N/A	N/A	N/A	53.0	32.2
nitric acid	N/A	N/A	N/A	2.65	1.61125
Cadmium	225	N/A	N/A	N/A	0.05
7500 Series PA Tuning 2					
7500 Series PA Tuning 2	N/A	N/A	15620.0	10.0	161.1
Hydrochloric acid	N/A	N/A	1562	1.038	N/A
nitric acid	N/A	N/A	N/A	2.65	1.61125

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
7500 Series PA Tuning 1			
nitric acid	Acute LC50 180000 µg/l Marine water	Crustaceans - *Carcinus maenas* - Adult	48 hours
Cadmium	Acute EC50 0.095 mg/l Marine water	Algae - *Ulva pertusa*	96 hours
	Acute EC50 200 µg/l Fresh water	Aquatic plants - *Lemna minor*	4 days
	Acute EC50 13.5 µg/l Fresh water	Daphnia - *Daphnia magna* - Neonate	48 hours
	Acute LC50 0.072 µg/l Marine water	Crustaceans - *Amphipoda* - Adult	48 hours
	Acute LC50 1 µg/l Fresh water	Fish - *Pimephales promelas* - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 2 µg/l Fresh water	Algae - *Parachlorella kessleri* - Exponential growth phase	72 hours
	Chronic NOEC 0.02 µg/l Fresh water	Fish - *Cyprinus carpio*	4 weeks
7500 Series PA Tuning 2			
Hydrochloric acid	Acute LC50 240000 µg/l Marine water	Crustaceans - *Carcinus maenas* - Adult	48 hours
	Acute LC50 282 ppm Fresh water	Fish - *Gambusia affinis* - Adult	96 hours
nitric acid	Acute LC50 180000 µg/l Marine water	Crustaceans - *Carcinus maenas* - Adult	48 hours

Persistence and degradability

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
7500 Series PA Tuning 1 nitric acid	-	-	Readily
7500 Series PA Tuning 2 nitric acid	-	-	Readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
7500 Series PA Tuning 1 nitric acid	-0.21	-	Low
7500 Series PA Tuning 2 nitric acid	-0.21	-	Low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	ADG	IMDG	IATA
UN number	UN3264	UN3264	UN3264
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric acid, nitric acid)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hydrochloric acid, nitric acid)	Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid, nitric acid)
Transport hazard class(es)	8 	8 	8 
Packing group	III	III	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

Section 14. Transport information

ADG : **Hazchem code** 2X
Special provisions 223, 274

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-A, S-B
Special provisions 223, 274

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: 5 L. Packaging instructions: 852. Cargo Aircraft Only: 60 L. Packaging instructions: 856. Limited Quantities - Passenger Aircraft: 1 L. Packaging instructions: Y841.
Special provisions A3, A803

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

6, 5

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.
New Zealand : Not determined.
United States : Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 09/05/2024
Date of previous issue : 28/06/2021
Version : 7

Section 16. Any other relevant information

Key to abbreviations : ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

Procedure used to derive the classification

Classification	Justification
7500 Series PA Tuning 1	
CORROSIVE TO METALS - Category 1	Expert judgment
SKIN CORROSION/IRRITATION - Category 1	On basis of test data
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	On basis of test data
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2	Calculation method
7500 Series PA Tuning 2	
CORROSIVE TO METALS - Category 1	Expert judgment
ACUTE TOXICITY (inhalation) - Category 3	Calculation method
SKIN CORROSION/IRRITATION - Category 1	On basis of test data
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	On basis of test data

Indicates information that has changed from previously issued version.

Notice to reader

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