

# Titanium ICP-MS Standard Novachem Pty Ltd

Version No: 1.1

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: **07/05/2023** Print Date: **07/05/2023** S.GHS.AUS.EN

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

Product Identifier			
Product name	Titanium ICP-MS Standard		
Synonyms	Not Available		
Other means of identification	ICP-MS-64W-0.1X-1		

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

Relevant identified uses Laboratory Chemical Reference Material

### Details of the manufacturer or supplier of the safety data sheet

Registered company name	Novachem Pty Ltd	Novachem Pty Ltd		
Address	25 Crissane Road, Heidelberg West Victoria 3081 Australia	25 Crissane Road, Heidelberg West Victoria 3081 Australia		
Telephone	+61384151255	+61384151255		
Fax	+61386250088	+61386250088		
Website	www.novachem.com.au	www.novachem.com.au		
Email	novachem@novachem.com.au	novachem@novachem.com.au		

### Emergency telephone number

Association / Organisation	Victorian Poisons Information Centre	Victorian Poisons Information Centre	
Emergency telephone numbers	13 11 26	13 11 26	
Other emergency telephone numbers	Not Available	Not Available	

### **SECTION 2 Hazards identification**

### Classification of the substance or mixture

Poisons Schedule	Not Applicable
Classification [1]	Acute Toxicity (Dermal) Category 4, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3
Legend:	1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements

Hazard pictogram(s)



Signal word

Warning

### Hazard statement(s)

H312	Harmful in contact with skin.
H335	May cause respiratory irritation.

### Precautionary statement(s) Prevention

P271	Use only outdoors or in a well-ventilated area.		
P261	Avoid breathing mist/vapours/spray.		
P280	Wear protective gloves and protective clothing.		

Version No: 1.1 Page 2 of 9 Issue Date: 07/05/2023 Print Date: 07/05/2023

### **Titanium ICP-MS Standard**

Precautionary statement(s) Response

	<u> </u>			
P312	all a POISON CENTER/doctor/physician/first aider/if you feel unwell.			
P302+P352	IF ON SKIN: Wash with plenty of water.			
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.			
P362+P364	Take off contaminated clothing and wash it before reuse.			

### Precautionary statement(s) Storage

P405	Store locked up.	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.	

### Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

### **SECTION 3 Composition / information on ingredients**

### Substances

See section below for composition of Mixtures

#### **Mixtures**

CAS No	%[weight] Name				
16962-40-6	0.413 ammonium hexafluorotitanate(IV)				
7664-39-3	<0.001	hydrofluoric acid			
7732-18-5	99.586 <u>water</u>				
Legend:	Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4.  Classification drawn from C&L * EU IOELVs available				

### **SECTION 4 First aid measures**

### Description of first aid measures

Eye Contact	If this product comes in contact with the eyes:  Nash out immediately with fresh running water.  Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.  Seek medical attention without delay; if pain persists or recurs seek medical attention.  Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs:  Immediately remove all contaminated clothing, including footwear.  Flush skin and hair with running water (and soap if available).  Seek medical attention in event of irritation.
Inhalation	<ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor, without delay.</li> </ul>
Ingestion	<ul> <li>Immediately give a glass of water.</li> <li>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>

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

Treat symptomatically.

## **SECTION 5 Firefighting measures**

### **Extinguishing media**

- ▶ There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

### Special hazards arising from the substrate or mixture

### Advice for firefighters

### Fire Fighting

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- ▶ Wear breathing apparatus plus protective gloves in the event of a fire.
- Prevent, by any means available, spillage from entering drains or water courses.
- ▶ Use fire fighting procedures suitable for surrounding area.

Version No: 1.1 Page 3 of 9 Issue Date: 07/05/2023

#### **Titanium ICP-MS Standard**

Print Date: 07/05/2023

### Fire/Explosion Hazard

- Non combustible.
- Not considered a significant fire risk, however containers may burn.

Decomposition may produce toxic fumes of:

metal oxides

May emit poisonous fumes.

May emit corrosive fumes

HAZCHEM Not Applicable

### **SECTION 6 Accidental release measures**

### Personal precautions, protective equipment and emergency procedures

See section 8

#### **Environmental precautions**

See section 12

### Methods and material for containment and cleaning up

**Minor Spills** 

- ► Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.

**Major Spills** 

Moderate hazard.

- Clear area of personnel and move upwind.
  - Alert Fire Brigade and tell them location and nature of hazard.
  - Wear breathing apparatus plus protective gloves.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

### **SECTION 7 Handling and storage**

### Precautions for safe handling

Safe handling

- ► Avoid all personal contact, including inhalation.
- ▶ Wear protective clothing when risk of exposure occurs.
- ▶ Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

Other information

### Conditions for safe storage, including any incompatibilities

Suitable container

- Polyethylene or polypropylene container.
- Packing as recommended by manufacturer.
- ▶ Check all containers are clearly labelled and free from leaks.

Storage incompatibility

None known

### **SECTION 8 Exposure controls / personal protection**

### **Control parameters**

### Occupational Exposure Limits (OEL)

### **INGREDIENT DATA**

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	hydrofluoric acid	Hydrogen fluoride (as F)	Not Available	Not Available	3 ppm / 2.6 mg/m3	Not Available

### **Emergency Limits**

Ingredient	TEEL-1	TEEL-2	TEEL-3
ammonium hexafluorotitanate(IV)	30 mg/m3	330 mg/m3	2,000 mg/m3
hydrofluoric acid	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
ammonium hexafluorotitanate(IV)	Not Available	Not Available
hydrofluoric acid	30 ppm	Not Available
water	Not Available	Not Available

### Occupational Exposure Banding

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit
Notes:	Occupational exposure banding is a process of assigning chemicals into s	specific categories or bands based on a chemical's potency and the

adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.

Version No: 1.1 Page 4 of 9 Issue Date: 07/05/2023 Print Date: 07/05/2023

#### **Titanium ICP-MS Standard**

Ingredient Occupational Exposure Band Limit Occupational Exposure Band Rating ammonium Е ≤ 0.01 mg/m<sup>3</sup> hexafluorotitanate(IV) Notes: Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health.

#### **Exposure controls**

#### Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

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











### Eye and face protection

- Safety glasses with side shields.
- Chemical goggles
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

#### Skin protection

#### See Hand protection below

### Hands/feet protection

Wear chemical protective gloves, e.g. PVC.

▶ Wear safety footwear or safety gumboots, e.g. Rubber

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to

manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care.

#### Body protection

See Other protection below

### Other protection

- Overalls. P.V.C apron.
- Barrier cream.
- ► Skin cleansing cream.

### Recommended material(s) **GLOVE SELECTION INDEX**

### Respiratory protection

Type B-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	B-AUS / Class1 P2	-
up to 50	1000	-	B-AUS / Class 1 P2
up to 50	5000	Airline *	-
up to 100	5000	-	B-2 P2
up to 100	10000	-	B-3 P2
100+			Airline**

<sup>\* -</sup> Continuous Flow \*\* - Continuous-flow or positive pressure demand A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur  $\label{eq:continuous} \mbox{dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = 100 \mbox{Mercury} = 100 \$ Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Version No: **1.1** Page **5** of **9** Issue Date: **07/05/2023** 

### **Titanium ICP-MS Standard**

Print Date: 07/05/2023

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

Titanium ICP-MS Standard

Material	СРІ
NEOPRENE	A
BUTYL	С
BUTYL/NEOPRENE	С
NAT+NEOPR+NITRILE	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
PE	С
PVA	С
PVC	С
SARANEX-23	С
VITON	С
VITON/NEOPRENE	С

<sup>\*</sup> CPI - Chemwatch Performance Index

**NOTE**: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

### **SECTION 9 Physical and chemical properties**

### Information on basic physical and chemical properties

Appearance	Clear liquid		
	ı		1
Physical state	Liquid	Relative density (Water = 1)	1
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	0	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	2.33	Gas group	Not Available
Solubility in water	Miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

### **SECTION 10 Stability and reactivity**

Reactivity	See section 7

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

<sup>\*</sup> Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Version No: 1.1 Page 6 of 9 Issue Date: 07/05/2023 Print Date: 07/05/2023

### **Titanium ICP-MS Standard**

Chemical stability	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

## **SECTION 11 Toxicological information**

Serious Eye Damage/Irritation

Respiratory or Skin sensitisation

×

×

Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.  Not normally a hazard due to non-volatile nature of product		
Ingestion	The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models).  Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum.		
Skin Contact	Skin contact with the material may be harmful; systemic effects may result following absorption.  The material is not thought to be a skin irritant (as classified by EC Directives using animal models). Temporary discomfort, however, may result from prolonged dermal exposures.  Open cuts, abraded or irritated skin should not be exposed to this material  Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.		
Еуе	Although the liquid is not thought to be an irritant (as characterised by tearing or conjunctival redness (as		ntact with the eye may produce transient discomfort
Chronic	Long-term exposure to respiratory irritants may resul Substance accumulation, in the human body, may oc		
	TOXICITY	IRRITATION	
Titanium ICP-MS Standard	Not Available	Not Available	
ammonium	TOXICITY	IRRITATION	
hexafluorotitanate(IV)	Not Available	Not Available	
hydrofluoric acid	TOXICITY	IRRITATION	) mg SEVERE
	Inhalation(Mouse) LC50; 342 ppm4h <sup>[2]</sup>	Eye (human): 50	Jmg - Severe
water	TOXICITY	IRRITATION  Not Available	
Legend:	Oral (Rat) LD50: >90000 mg/kg <sup>[2]</sup> Not Available  1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise		
	specified data extracted from RTECS - Register of To		
HYDROFLUORIC ACID	(liver and kidney damage) [Manufacturer] for hydroge Laboratory (in vitro) and animal studies show, expost producing mutation.  The following information refers to contact allergens. Contact allergies quickly manifest themselves as con eczema involves a cell-mediated (T lymphocytes) im involve antibody-mediated immune reactions.  The material may produce severe irritation to the eye produce conjunctivitis.  The material may produce respiratory tract irritation,	are to the material may result in a poss as a group and may not be specific to tact eczema, more rarely as urticaria o mune reaction of the delayed type. Oth causing pronounced inflammation. Re	this product. or Quincke's oedema. The pathogenesis of contact ner allergic skin reactions, e.g. contact urticaria, epeated or prolonged exposure to irritants may
Titanium ICP-MS Standard & AMMONIUM IEXAFLUOROTITANATE(IV) & HYDROFLUORIC ACID	Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia.		
HYDROFLUORIC ACID & WATER	No significant acute toxicological data identified in lite	erature search.	
Acute Toxicity	<b>~</b>	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
5		Hoproductivity	

STOT - Single Exposure

×

STOT - Repeated Exposure

Version No: 1.1 Page 7 of 9 Issue Date: 07/05/2023 Print Date: 07/05/2023

#### **Titanium ICP-MS Standard**

Mutagenicity **Aspiration Hazard** 

> 💢 – Data either not available or does not fill the criteria for classification - Data available to make classification

### **SECTION 12 Ecological information**

#### **Toxicity**

Titanium ICP-MS Standard	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
ammonium hexafluorotitanate(IV)	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
hydrofluoric acid	NOEC(ECx)	504h	Crustacea	3.7mg/l	2
	EC50	96h	Algae or other aquatic plants	43mg/l	2
	LC50	96h	Fish	51mg/l	2
	EC50	48h	Crustacea	97mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
water	Not Available	Not Available	Not Available	Not Available	Not Available
Legend:	Ecotox databas		CHA Registered Substances - Ecotoxicological Informatic Aquatic Hazard Assessment Data 6. NITE (Japan) - Bio		

#### For Metal

Atmospheric Fate - Metal-containing inorganic substances generally have negligible vapour pressure and are not expected to partition to air.

Environmental Fate: Environmental processes, such as oxidation, the presence of acids or bases and microbiological processes, may transform insoluble metals to more soluble ionic forms. Environmental processes may enhance bioavailability and may also be important in changing solubilities.

Aquatic/Terrestrial Fate: When released to dry soil, most metals will exhibit limited mobility and remain in the upper layer; some will leach locally into ground water and/ or surface water ecosystems when soaked by rain or melt ice. A metal ion is considered infinitely persistent because it cannot degrade further.

For Fluorides: Small amounts of fluoride have beneficial effects however; excessive intake over long periods may cause dental and/or skeletal fluorosis. Fluorides are absorbed by humans following inhalation of workplace and ambient air that has been contaminated, ingestion of drinking water and foods and dermal contact. Populations living in areas with high fluoride levels in groundwater may be exposed to higher levels of fluorides in their drinking water or in beverages prepared with the water. Among these populations, outdoor labourers, people living in hot climates, and people with excessive thirst will generally have the greatest daily intake of fluorides because they consume greater amounts of water. DO NOT discharge into sewer or waterways

### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
water	LOW	LOW

### Bioaccumulative potential

Ingredient	Bioaccumulation
	No Data available for all ingredients

### Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

### **SECTION 13 Disposal considerations**

### Waste treatment methods

- Containers may still present a chemical hazard/ danger when empty.
- ▶ Return to supplier for reuse/ recycling if possible.

### Otherwise

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- ▶ Where possible retain label warnings and SDS and observe all notices pertaining to the product.

Legislation addressing waste disposal requirements may differ by country, state and/or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Product / Packaging disposal
- ► Reduction ► Reuse
- Recycling
- ► Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

Version No: 1.1 Page 8 of 9 Issue Date: 07/05/2023 Print Date: 07/05/2023

#### **Titanium ICP-MS Standard**

- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material).
- ► Decontaminate empty containers.

#### **SECTION 14 Transport information**

#### Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

### Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

### Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
ammonium hexafluorotitanate(IV)	Not Available
hydrofluoric acid	Not Available
water	Not Available

### Transport in bulk in accordance with the IGC Code

Product name	Ship Type
ammonium hexafluorotitanate(IV)	Not Available
hydrofluoric acid	Not Available
water	Not Available

### **SECTION 15 Regulatory information**

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

ammonium hexafluorotitanate(IV) is found on the following regulatory lists

Not Applicable

### hydrofluoric acid is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 3

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 4

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

### water is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 6

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 7

Australian Inventory of Industrial Chemicals (AIIC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

### National Inventory Status

reactional involvery otatao	
National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	No (ammonium hexafluorotitanate(IV))
Canada - DSL	No (ammonium hexafluorotitanate(IV))
Canada - NDSL	No (hydrofluoric acid; water)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	No (ammonium hexafluorotitanate(IV))

Version No: 1.1 Page 9 of 9 Issue Date: 07/05/2023 Print Date: 07/05/2023

### **Titanium ICP-MS Standard**

National Inventory	Status
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (ammonium hexafluorotitanate(IV))
Vietnam - NCI	Yes
Russia - FBEPH	No (ammonium hexafluorotitanate(IV))
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

### **SECTION 16 Other information**

Revision Date	07/05/2023
Initial Date	07/05/2023

#### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

### **Definitions and abbreviations**

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

ES: Exposure Standard

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection

OTV: Odour Threshold Value BCF: BioConcentration Factors

BEI: Biological Exposure Index

AIIC: Australian Inventory of Industrial Chemicals

DSL: Domestic Substances List

NDSL: Non-Domestic Substances List

IECSC: Inventory of Existing Chemical Substance in China

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

NLP: No-Longer Polymers

ENCS: Existing and New Chemical Substances Inventory

KECI: Korea Existing Chemicals Inventory

NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances

TSCA: Toxic Substances Control Act

TCSI: Taiwan Chemical Substance Inventory

INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

Powered by AuthorITe, from Chemwatch.