



SAFETY DATA SHEET

Issue Date 12-Jan-2018

Revision Date 07-Sep-2021

Version H

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code SAC047
Product Name Niobium Alloy Powder (flammable)
UN/ID no 3089
Synonyms All niobium alloy powders, columbium alloy powders, C103 powder (former product #516)

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

Recommended Use Alloy product manufacture

Uses advised against

1.3. Details of the supplier of the safety data sheet

Manufacturer

ATI, 1000 Six PPG Place, Pittsburgh, PA 15222 USA

1.4. Emergency telephone number

Emergency Telephone Chemtrec: +1-703-741-5970

Section 2: HAZARDS IDENTIFICATION

This material is classified per Regulation (EC) No 1272/2008.

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flammable solids	Category 1
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2.2. Label elements

Emergency Overview

Danger

Hazard statements

Flammable solids



Appearance Powder

Physical state Solid

Odour Odourless

Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 Ground/bond container and receiving equipment
 If dust clouds can occur, use explosion-proof electrical/ ventilating/lighting/equipment

Precautionary Statements - Response

In case of fire: Use salt (NaCl) for extinction

2.3 Hazards not otherwise classified (HNOC)

Not applicable

Other Information

When product is subjected to welding, burning, melting, sawing, brazing, grinding, buffing, polishing, or other similar heat-generating processes, the following potentially hazardous airborne particles and/or fumes may be generated:

Titanium dioxide, an IARC Group 2B carcinogen.

Vanadium pentoxide (V₂O₅) affects eyes, skin, respiratory system.

Soluble molybdenum compounds such as molybdenum trioxide may cause lung irritation.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances**Synonyms**

All niobium alloy powders, columbium alloy powders, C103 powder (former product #516).

Chemical Name	EC No	CAS No	Weight-%
Niobium	231-113-5	7440-03-1	40 - >99
Titanium	231-142-3	7440-32-6	0 - 60
Aluminium	231-072-3	7429-90-5	0 - 50
Tungsten	231-143-9	7440-33-7	0 - 30
Tantalum	231-135-5	7440-25-7	0 - 30
Hafnium	231-166-4	7440-58-6	0 - 30
Vanadium	231-171-1	7440-62-2	0 - 10
Molybdenum	231-107-2	7439-98-7	0 - 10
Zirconium	231-176-9	7440-67-7	0 - 5
Hydrogen	215-605-7	1333-74-0	0 - 1.2

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures**Inhalation**

If excessive amounts of smoke, fume, or particulate are inhaled during processing, remove to fresh air and consult a qualified health professional.

Skin Contact

None under normal use conditions.

Eye contact

In the case of particles coming in contact with eyes during processing, treat as with any foreign object.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed**Symptoms**

None anticipated.

4.3. Indication of any immediate medical attention and special treatment needed**Note to doctors**

Treat symptomatically.

Section 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Isolate large fires and allow to burn out. Smother small fires with salt (NaCl).

Unsuitable extinguishing media

Do not spray water on burning metal as an explosion may occur. This explosive characteristic is caused by the hydrogen and steam generated by the reaction of water with the burning material

5.2. Special hazards arising from the substance or mixture

Intense heat Very fine, high surface area material resulting from processing this product may ignite spontaneously at room temperature WARNING: Fine particles of this product may form combustible dust-air mixtures. Keep particles away from all ignition sources including heat, sparks, and flame. Prevent dust accumulations to minimise combustible dust hazard

Hazardous combustion products Titanium dioxide, an IARC Group 2B carcinogen. Vanadium pentoxide (V₂O₅) affects eyes, skin, respiratory system. Soluble molybdenum compounds such as molybdenum trioxide may cause lung irritation.

5.3. Advice for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment as required.

For emergency responders

Use personal protective equipment as required. Follow Emergency Response Guidebook, Guide No. 170.

6.2. Environmental precautions

Collect spillage to prevent release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Sweep or shovel material into dry containers using non-sparking tools. Avoid creating uncontrolled dust.

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Very fine, high surface area material resulting from grinding, buffing, polishing, or similar processes of this product may ignite spontaneously at room temperature. WARNING: Fine particles of this product may form combustible dust-air mixtures. Keep particles away from all ignition sources including heat, sparks, and flame. Prevent dust accumulations to minimise combustible dust hazard.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities**Storage Conditions**

Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). For long-term storage, keep sealed in argon-filled steel drums.

Incompatible materials

Dissolves in hydrofluoric acid. Ignites in the presence of fluorine. When heated above 200°C, reacts exothermically with the following: Chlorine, bromine, halocarbons, carbon tetrachloride, carbon tetrafluoride, and freon.

7.3. Specific end use(s)**Risk Management Methods (RMM)**

The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Niobium 7440-03-1	-	-	-	-	-
Titanium 7440-32-6	-	-	-	-	-
Aluminium 7429-90-5	-	STEL: 30 mg/m ³ STEL: 12 mg/m ³ TWA: 10 mg/m ³ TWA: 4 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 4 mg/m ³ TWA: 1.5 mg/m ³
Tungsten 7440-33-7	-	STEL: 10 mg/m ³ TWA: 5 mg/m ³	-	STEL: 10 mg/m ³ TWA: 5 mg/m ³	-
Tantalum 7440-25-7	-	STEL: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 4 mg/m ³ TWA: 1.5 mg/m ³
Hafnium 7440-58-6	-	-	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³	-
Vanadium 7440-62-2	-	-	-	-	Skin
Molybdenum 7439-98-7	-	-	-	TWA: 10 mg/m ³ TWA: 3 mg/m ³	-
Zirconium 7440-67-7	-	TWA: 5 mg/m ³	-	STEL: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 1 mg/m ³ Ceiling / Peak: 1 mg/m ³
Hydrogen 1333-74-0	-	-	-	-	-
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Niobium 7440-03-1	-	-	-	-	TWA: 5 mg/m ³ TWA: 0.5 mg/m ³
Titanium 7440-32-6	-	-	-	-	-
Aluminium 7429-90-5	-	TWA: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 0.05 mg/m ³	TWA: 1.5 mg/m ³	TWA: 5 mg/m ³ TWA: 2 mg/m ³
Tungsten 7440-33-7	-	STEL: 10 mg/m ³ TWA: 5 mg/m ³	-	TWA: 5 mg/m ³	TWA: 5 mg/m ³
Tantalum 7440-25-7	-	TWA: 5 mg/m ³	-	TWA: 5 mg/m ³	TWA: 5 mg/m ³
Hafnium 7440-58-6	-	TWA: 0.5 mg/m ³	-	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³
Vanadium 7440-62-2	-	-	-	-	-
Molybdenum 7439-98-7	-	TWA: 10 mg/m ³ TWA: 3 mg/m ³	-	TWA: 0.5 mg/m ³	-
Zirconium 7440-67-7	-	STEL: 10 mg/m ³ TWA: 5 mg/m ³	-	TWA: 1 mg/m ³	TWA: 5 mg/m ³

Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Hydrogen 1333-74-0	-	-	-	-	-
Niobium 7440-03-1	STEL 10 mg/m ³ STEL 1 mg/m ³ TWA: 5 mg/m ³ TWA: 0.5 mg/m ³	-	-	-	-
Titanium 7440-32-6	-	-	STEL: 30 mg/m ³ TWA: 10 mg/m ³	-	-
Aluminium 7429-90-5	STEL 20 mg/m ³ TWA: 10 mg/m ³	TWA: 3 mg/m ³	TWA: 2.5 mg/m ³ TWA: 1.2 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 1 mg/m ³ TWA: 5 mg/m ³
Tungsten 7440-33-7	STEL 10 mg/m ³ TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³
Tantalum 7440-25-7	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³	-	TWA: 5 mg/m ³ STEL: 10 mg/m ³
Hafnium 7440-58-6	STEL 5 mg/m ³ TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³ STEL: 1.5 mg/m ³	TWA: 0.5 mg/m ³ STEL: 1.5 mg/m ³
Vanadium 7440-62-2	STEL 1 mg/m ³ TWA: 0.5 mg/m ³	-	-	TWA: 0.2 mg/m ³ Ceiling: 0.05 mg/m ³ STEL: 0.6 mg/m ³	-
Molybdenum 7439-98-7	STEL 20 mg/m ³ TWA: 10 mg/m ³	TWA: 10 mg/m ³	STEL: 10 mg/m ³ TWA: 4 mg/m ³	-	TWA: 0.5 mg/m ³
Zirconium 7440-67-7	TWA: 5 mg/m ³	TWA: 5 mg/m ³	STEL: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³
Hydrogen 1333-74-0	-	-	-	-	-

Derived No Effect Level (DNEL) No DNELs are available for this product as a whole

Predicted No Effect Concentration (PNEC) No PNECs are available for this product as a whole.

8.2. Exposure controls

Engineering Controls

Avoid generation of uncontrolled particles.

Personal protective equipment

Eye/face protection

When airborne particles may be present, appropriate eye protection is recommended. For example, tight-fitting goggles, foam-lined safety glasses or other protective equipment that shield the eyes from particles.

Skin and body protection

Fire/flame resistant/retardant clothing may be appropriate during hot work with the product.

Respiratory protection

When particulates/fumes/gases are generated and if exposure limits are exceeded or irritation is experienced, proper approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminate concentrations. Respiratory protection must be provided in accordance with current local regulations.

Environmental exposure controls Section 6: ACCIDENTAL RELEASE MEASURES.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Solid

Appearance

Powder

Colour

metallic grey or Silver

Odour

Odourless

Odour threshold

Not applicable

Property

Values

Remarks • Method

pH

-

Not applicable

Melting point / freezing point

2470 °C / 4480 °F

Boiling point / boiling range

-

Flash point

-

Evaporation rate

-

Not applicable

Flammability (solid, gas)

-

Flammable

Flammability Limit in Air

Upper flammability limit:	-	-
Lower flammability limit	-	-
Vapour pressure	-	Not applicable
Vapour density	-	Not applicable
Specific Gravity	8.57	
Water solubility	Insoluble	
Solubility(ies)		
Partition coefficient	-	Not applicable
Autoignition temperature	-	Not applicable
Decomposition temperature	-	Not applicable
Kinematic viscosity	-	Not applicable
Dynamic viscosity	-	Not applicable
Explosive properties	Not applicable	
Oxidising properties	Not applicable	

9.2. Other information

Softening point	-
Molecular weight	-
VOC Content (%)	Not applicable
Density	-
Bulk density	260 lb/ft3

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not applicable.

10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	May be ignited by heat, sparks or flames.

10.3. Possibility of hazardous reactions

Hazardous polymerisation

Hazardous polymerisation does not occur.

Possibility of Hazardous Reactions

None under normal processing.

10.4. Conditions to avoid

Dust formation and dust accumulation.

10.5. Incompatible materials

Dissolves in hydrofluoric acid. Ignites in the presence of fluorine. When heated above 200°C, reacts exothermically with the following: Chlorine, bromine, halocarbons, carbon tetrachloride, carbon tetrafluoride, and freon.

10.6. Hazardous decomposition products

When product is subjected to welding, burning, melting, sawing, brazing, grinding, buffing, polishing, or other similar heat-generating processes, the following potentially hazardous airborne particles and/or fumes may be generated: Titanium dioxide, an IARC Group 2B carcinogen. Vanadium pentoxide (V2O5) affects eyes, skin, respiratory system. Soluble molybdenum compounds such as molybdenum trioxide may cause lung irritation.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects**Product Information**

Inhalation	Product not classified.
Eye contact	Product not classified.
Skin Contact	Product not classified.
Ingestion	Product not classified.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Niobium	> 10,000 mg/kg bw	> 2000 mg/kg bw	-
Titanium	> 5000 mg/kg bw	-	-
Aluminium	15,900 mg/kg bw	-	> 1 mg/L
Tungsten	> 2000 mg/kg bw	> 2000 mg/kg bw	> 5.4 mg/L
Tantalum	> 2000 mg/kg bw	> 2000 mg/kg bw	> 5.18 mg/L
Hafnium	> 5000 mg/kg bw	-	>4.3mg/L
Vanadium	> 2000 mg/kg bw	-	-
Molybdenum	> 2000 mg/kg bw	> 2000 mg/kg bw	> 5.10 mg/L
Zirconium	> 5000 mg/kg bw	-	>4.3 mg/L
Hydrogen	-	-	> 15000 ppm (Rat) 1 h

Information on toxicological effects

Symptoms None known.

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

Acute toxicity Product not classified.

Skin corrosion/irritation Product not classified.

Serious eye damage/eye irritation Product not classified.

Sensitisation Product not classified.

Germ cell mutagenicity Product not classified.

Carcinogenicity Product not classified.

Reproductive toxicity Product not classified.

STOT - single exposure Product not classified.

STOT - repeated exposure Product not classified.

Aspiration hazard Product not classified.

Section 12: ECOLOGICAL INFORMATION**12.1. Toxicity**

This product as shipped is not classified for aquatic toxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Niobium	-	-	-	-
Titanium	The 72 h EC50 of titanium dioxide to <i>Pseudokirchnerella subcapitata</i> was 61 mg of TiO ₂ /L.	The 96 h LC50 of titanium dioxide to <i>Cyprinodon variegatus</i> was greater than 10,000 mg of TiO ₂ /L. The 96 h LC50 of titanium dioxide to <i>Pimephales</i>	The 3 h EC50 of titanium dioxide for activated sludge were greater than 1000 mg/L.	The 48 h EC50 of titanium dioxide to <i>Daphnia Magna</i> was greater than 1000 mg of TiO ₂ /L.

		promelas was greater than 1,000 mg of TiO ₂ /L .		
Aluminium	The 96-h EC50 values for reduction of biomass of <i>Pseudokirchneriella subcapitata</i> in AAP-Medium at pH 6, 7, and 8 were estimated as 20.1, 5.4, and 150.6 µg/L, respectively, for dissolved Al.	The 96 h LC50 of aluminum to <i>Oncorhynchus mykiss</i> was 7.4 mg of Al/L at pH 6.5 and 14.6 mg of Al/L at pH 7.5	-	The 48-hr LC50 for <i>Ceriodaphnia dubia</i> exposed to Aluminium chloride increased from 0.72 to greater than 99.6 mg/L with water hardness increasing from 25 to 200 mg/L.
Tungsten	The 72 h EC50 of sodium tungstate to <i>Pseudokirchnerella subcapitata</i> was 31.0 mg of W/L.	The 96 h LC50 of sodium tungstate to <i>Danio rerio</i> was greater than 106 mg of W/L.	The 30 min EC50 of sodium tungstate for activated sludge were greater than 1000 mg/L.	The 48 h EC50 of sodium tungstate to <i>Daphnia magna</i> was greater than 96 mg of W/L.
Tantalum	-	-	-	-
Hafnium	The 72 h EC50 of hafnium to <i>Pseudokirchneriella subcapitata</i> was greater than 8 µg of Hf/L (100% saturated solution).	The 96 h LC50 of Hafnium dioxide in water to <i>Danio rerio</i> was greater than the solubility limit of 0.007 mg Hf/L .	-	The 48 h EC50 of Hafnium dioxide to <i>Daphnia magna</i> was greater than the solubility limit of 0.007 mg Hf/L.
Vanadium	The 72 h EC50 of vanadium pentoxide to <i>Desmodesmus subspicatus</i> was 2,907 µg of V/L.	The 96 h LC50 of vanadium pentoxide to <i>Pimephales promelas</i> was 1,850 µg of V/L .	The 3 h EC50 of sodium metavanadate for activated sludge was greater than 100 mg/L.	The 48 h EC50 of sodium vanadate to <i>Daphnia magna</i> was 2,661 µg of V/L.
Molybdenum	The 72 h EC50 of sodium molybdate dihydrate to <i>Pseudokirchneriella subcapitata</i> was 362.9 mg of Mo/L.	The 96 h LC50 of sodium molybdate dihydrate to <i>Pimephales promelas</i> was 644.2 mg/L	The 3 h EC50 of molybdenum trioxide for activated sludge was 820 mg/L.	The 48 h LC50 of sodium molybdate dihydrate to <i>Ceriodaphnia dubia</i> was 1,015 mg/L. The 48 h LC50 of sodium molybdate dihydrate to <i>Daphnia magna</i> was greater than 1,727.8 mg/L.
Zirconium	The 14 d NOEC of zirconium dichloride oxide to <i>Chlorella vulgaris</i> was greater than 102.5 mg of Zr/L.	The 96 h LL50 of zirconium to <i>Danio rerio</i> was greater than 74.03 mg/L.	-	The 48 h EC50 of zirconium dioxide to <i>Daphnia magna</i> was greater than 74.03 mg of Zr/L.
Hydrogen	-	-	-	-

12.2. Persistence and degradability**12.3. Bioaccumulative potential****12.4. Mobility in soil****Mobility****12.5. Results of PBT and vPvB assessment**

The PBT and vPvB criteria do not apply to inorganic substances.

12.6. Other adverse effects

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

IMDG

14.1 UN/ID no	3089
14.2 Proper shipping name	Metal powders, flammable, n.o.s. (Niobium Alloy Powder)
14.3 Hazard Class	4.1
14.4 Packing Group	II
14.5 Marine pollutant	Not applicable
14.6 Special Provisions	IB8, IP2, IP4, T3, TP33
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	Not applicable

RID

14.1 UN/ID no	3089
14.2 Proper shipping name	Metal powders, flammable, n.o.s. (Niobium Alloy Powder)
14.3 Hazard Class	4.1
14.4 Packing Group	II
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	IB8, IP2, IP4, T3, TP33

ADR

14.1 UN/ID no	3089
14.2 Proper shipping name	Metal powders, flammable, n.o.s. (Niobium Alloy Powder)
14.3 Hazard Class	4.1
14.4 Packing Group	II
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	IB8, IP2, IP4, T3, TP33

ICAO (air)

14.1 UN/ID no	3089
14.2 Proper shipping name	Metal powders, flammable, n.o.s. (Niobium Alloy Powder)
14.3 Hazard Class	4.1
14.4 Packing Group	II
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	IB8, IP2, IP4, T3, TP33

IATA

14.1 UN/ID no	3089
14.2 Proper shipping name	Metal powders, flammable, n.o.s. (Niobium Alloy Powder)
14.3 Hazard Class	4.1
14.4 Packing Group	II
Description	.
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	IB8, IP2, IP4, T3, TP33 170
	ERG Code

Section 15: REGULATORY INFORMATION

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

Chemical Name	French RG number	Title
Niobium	-	-

7440-03-1		
Titanium 7440-32-6	-	-
Aluminium 7429-90-5	RG 32 RG 16, RG 16bis	-
Tungsten 7440-33-7	-	-
Tantalum 7440-25-7	-	-
Hafnium 7440-58-6	-	-
Vanadium 7440-62-2	RG 66	-
Molybdenum 7439-98-7	-	-
Zirconium 7440-67-7	-	-
Hydrogen 1333-74-0	-	-

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

International Inventories

DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Not Listed
AICS	Not Listed

Legend:

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
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

No chemical safety assessment has been performed for this product.

Section 16: OTHER INFORMATION

Issue Date	12-Jan-2018
Revision Date	07-Sep-2021
Revision Note	SDS sections updated: 3.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Note:

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

End of Safety Data Sheet

**Additional information available
from:**

Safety data sheets and labels available at ATImetals.com