

SAFETY DATA SHEET

Issue Date 28-May-2015 Revision Date 07-Jan-2019 Version Î

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

1.1. Product identifier

Product Code PM007

Product Name Titanium Alloy With Cobalt Compacts

Synonyms Titanium Alloy With Cobalt Compacts: - TNM Co Compacts

Contains Cobalt, Nickel

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

Recommended Use Titanium 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 product is an article and, as such, does not present a hazard to human health by inhalation or ingestion

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Respiratory sensitisation	Category 1B
Skin sensitisation	Category 1
Carcinogenicity	Category 1B

2.2. Label elements

Emergency Overview

Danger

Hazard statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause cancer

May cause an allergic skin reaction



Revision Date 07-Jan-2019

Appearance Various massive product Physical state Solid Odour Odourless forms

Precautionary Statements - Prevention

Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Wear protective gloves

Precautionary Statements - Response

If skin irritation or rash occurs: Get medical advice/attention
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

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, Hexavalent Chromium (Chromium VI) may cause lung, nasal, and/or sinus cancer, Soluble molybdenum compounds such as molybdenum trioxide may cause lung irritation.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms Titanium Alloy With Cobalt Compacts: - TNM Co Compacts.

Chemical Name	EC No	CAS No	Weight-%
Titanium	231-142-3	7440-32-6	50-100
Aluminium	231-072-3	7429-90-5	0-40
Niobium	231-113-5	7440-03-1	0 - 27
Tungsten	231-143-9	7440-33-7	0 - 10
Molybdenum	231-107-2	7439-98-7	0 - 10
Chromium	231-157-5	7440-47-3	0-10
Zirconium	231-176-9	7440-67-7	0-5
Cobalt	213-158-0	7440-48-4	0.1 - 2
Boron	231-151-2	7440-42-8	0 - 1

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 In the case of skin allergic reactions see a doctor.

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

foreign object.

Ingestion Not an expected route of exposure.

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

Symptoms May cause allergic skin reaction.

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

Product not flammable in the form as distributed, flammable as finely divided particles or pieces resulting from processing of this product. Isolate large fires and allow to burn out. Smother small fires with salt (NaCl) or class D dry powder fire extinguisher.

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 grinding, buffing, polishing, or similar processes of this product may ignite spontaneously at room temperature WARNING: Fine particles resulting from grinding, buffing, polishing, or similar processes 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, Hexavalent Chromium (Chromium VI) may cause lung, nasal, and/or sinus cancer, 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.

6.2. Environmental precautions

Not applicable to massive product.

6.3. Methods and material for containment and cleaning up

Methods for containment Not applicable to massive product.

Methods for cleaning up Not applicable to massive product.

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 resulting from grinding, buffing, polishing, or similar processes 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 chips, turnings, dust, and other small particles away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

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
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/m³ TWA: 5 mg/m³	TWA: 4 mg/m³ TWA: 1.5 mg/m³
Niobium 7440-03-1	-	-	-	-	-
Tungsten 7440-33-7	-	STEL: 10 mg/m ³ TWA: 5 mg/m ³	-	STEL: 10 mg/m ³ TWA: 5 mg/m ³	-
Molybdenum 7439-98-7	-	-	-	TWA: 10 mg/m ³ TWA: 3 mg/m ³	-
Chromium 7440-47-3	TWA: 2 mg/m ³	STEL: 1.5 mg/m ³ TWA: 0.5 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³
Zirconium 7440-67-7	-	TWA: 5 mg/m ³	-	STEL: 10 mg/m³ TWA: 5 mg/m³	TWA: 1 mg/m³ Ceiling / Peak: 1 mg/m³
Cobalt 7440-48-4	-	STEL: 0.3 mg/m ³ TWA: 0.1 mg/m ³	-	TWA: 0.02 mg/m ³	Skin
Boron 7440-42-8	-	-	-	-	-
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Titanium 7440-32-6	-	-	-	-	-
Aluminium 7429-90-5	-	TWA: 10 mg/m³ TWA: 5 mg/m³	TWA: 0.05 mg/m ³	TWA: 1.5 mg/m ³	TWA: 5 mg/m ³ TWA: 2 mg/m ³
Niobium 7440-03-1	-	-	-	-	TWA: 5 mg/m ³ TWA: 0.5 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
Molybdenum 7439-98-7	-	TWA: 10 mg/m ³ TWA: 3 mg/m ³	-	TWA: 0.5 mg/m ³	-
Chromium 7440-47-3	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³	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
Cobalt 7440-48-4	-	TWA: 0.02 mg/m ³	TWA: 0.02 mg/m ³	TWA: 0.02 mg/m ³	TWA: 0.01 mg/m ³
Boron			_		

Page 4/11

7440-42-8					
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
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/m³ STEL: 10 mg/m³	TWA: 1 mg/m³ TWA: 5 mg/m³
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	-	-	-	-
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/m³ STEL: 10 mg/m³
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
Chromium 7440-47-3	TWA: 2 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: 2 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/m³ STEL: 10 mg/m³	TWA: 5 mg/m ³ STEL: 10 mg/m ³
Cobalt 7440-48-4	Skin	Skin TWA: 0.05 mg/m³	STEL: 0.2 mg/m ³ TWA: 0.02 mg/m ³	TWA: 0.02 mg/m ³ STEL: 0.06 mg/m ³	TWA: 0.1 mg/m ³
Boron 7440-42-8	-	-	-	-	-

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

Predicted No Effect Concentration

No PNECs are available for this product as a whole.

(PNEC)

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. Cut-resistant gloves and/or protective clothing may be appropriate when sharp surfaces are

present.

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.

Not applicable

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

AppearanceVarious massive product formsOdourOdourlessColourmetallic grey or SilverOdour thresholdNot applicable

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH Melting point/freezing point

1400-1540 °C / 2560-2800 °F

Boiling point / boiling range Flash point

Evaporation rate Flammability (solid, gas)

Product not flammable in the form as distributed, flammable as finely divided particles or pieces resulting from processing of this product

Flammability Limit in Air

Upper flammability limit:

Lower flammability limit -

Vapour pressure - Not applicable
Vapour density - Not applicable

Specific Gravity 8.0-8.5 Water solubility Insoluble

Solubility(ies)

Partition coefficient
Autoignition temperature
Decomposition temperature
Kinematic viscosity
Dynamic viscosity

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
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 -

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 None.

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. Hexavalent Chromium (Chromium VI) may cause lung, nasal, and/or sinus cancer. Soluble molybdenum compounds such as molybdenum trioxide may cause lung irritation.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

InhalationNot an expected route of exposure for product in massive form.Eye contactNot an expected route of exposure for product in massive form.

Skin Contact May cause sensitisation by skin contact.

Ingestion Not an expected route of exposure for product in massive form.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium	> 5000 mg/kg bw	-	-
Aluminium	15,900 mg/kg bw	-	> 1 mg/L
Niobium	> 10,000 mg/kg bw	> 2000 mg/kg bw	-
Tungsten	> 2000 mg/kg bw	> 2000 mg/kg bw	> 5.4 mg/L
Molybdenum	> 2000 mg/kg bw	> 2000 mg/kg bw	> 5.10 mg/L
Chromium	> 3400 mg/kg bw	-	> 5.41 mg/L
Zirconium	> 5000 mg/kg bw	-	>4.3 mg/L
Cobalt	550 mg/kg bw	>2000 mg/kg bw	<0.05 mg/L
Boron	> 2000 mg/kg bw	-	> 5.08 mg/L

Information on toxicological effects

Symptoms May cause sensitisation by skin contact. May cause allergy or asthma symptoms or

breathing difficulties if inhaled.

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

Acute toxicity Cobalt-containing powders may be harmful if inhaled.

Skin corrosion/irritation Product not classified.

Serious eye damage/eye irritation Product not classified.

Sensitisation May cause sensitisation by skin contact. Cobalt-containing alloys may cause sensitization

by inhalation.

Germ cell mutagenicity Product not classified.

Carcinogenicity May cause cancer by inhalation.

Chemical Name	ACGIH	IARC	NTP	OSHA
Chromium		Group 3		
7440-47-3		-		
Cobalt	A3	Group 2A	Known	X
7440-48-4		Group 2B		

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
Titanium	The 72 h EC50 of titanium	The 96 h LC50 of titanium	The 3 h EC50 of titanium	The 48 h EC50 of titanium

	dioxide to Pseudokirchnerella subcapitata was 61 mg of TiO2/L.	dioxide to Cyprinodon variegatus was greater than 10,000 mg of TiO2/L. The 96 h LC50 of titanium dioxide to Pimephales promelas was greater than 1,000 mg of TiO2/L.	dioxide for activated sludge were greater than 1000 mg/L.	dioxide to Daphnia Magna was greater than 1000 mg of TiO2/L.
Aluminium	The 96-h EC50 values for reduction of biomass of Pseudokirchneriella subcapitata in AAP-Medium at pH 6, 7, and 8 were estimated as 20.1, 5.4, and 150.6 µg/L, respectively, for dissolved AI.	The 96 h LC50 of aluminum to Oncorhynchus mykiss 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 Ceriodaphnia dubia 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.
Niobium	-	-	-	-
Tungsten	The 72 h EC50 of sodium tungstate to Pseudokirchnerella subcapitata was 31.0 mg of W/L.	The 96 h LC50 of sodium tungstate to Danio rerio 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 Daphnia magna was greater than 96 mg of W/L.
Molybdenum	The 72 h EC50 of sodium molybdate dihydrate to Pseudokirchneriella subcapitata was 362.9 mg of Mo/L.	The 96 h LC50 of sodium molybdate dihydrate to Pimephales promelas 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 Ceriodaphnia dubia was 1,015 mg/L. The 48 h LC50 of sodium molybdate dihydrate to Daphnia magna was greater than 1,727.8 mg/L.
Chromium	-	-	-	-
Zirconium	The 14 d NOEC of zirconium dichloride oxide to Chlorella vulgaris was greater than 102.5 mg of Zr/L.	The 96 h LL50 of zirconium to Danio rerio was greater than 74.03 mg/L.	-	The 48 h EC50 of zirconium dioxide to Daphnia magna was greater than 74.03 mg of Zr/L.
Cobalt	The 72 h EC50 of cobalt dichloride to Pseudokirchneriella subcapitata was 144 ug of Co/L.	Danio rerio.	The 3 h EC50 of cobalt dichloride for activated sludge was 120 mg of Co/L.	The 48 h LC50 of cobalt dichloride ranged from 0.61 mg Co/L for Ceriodaphnia dubia tested in soft, DOM-free water to >1800mg Co/L for Tubifex tubifex in very hard water.
Boron	The 72-h EC50 value for reduction of biomass of Pseudokirchneriella subcapitata exposed to Boric acid at pH 7.5 to 8.3 was 40.2 mg/L.	The 96-hr LC50 for Pimephales promelas exposed to Boric acid (82%)/borax (18%) mixture was 79.7 mg/L with water hardness of 91 mg/L and water pH of 8.0.	The 3 h NOEC of boric acid for activated sludge ranged from 17.5 to 20 mg/L.	The 48-hr LC50 for Ceriodaphnia dubia exposed to Boric acid/borax mixture ranged from 91 to 165 mg/L with pH ranging from 6.7 to 8.4.

12.2. Persistence and degradability

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12.3. Bioaccumulative potential

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12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

This product as shipped is not classified for environmental endpoints. However, when subjected to sawing or grinding, particles

may be generated that are classified for aquatic chronic toxicity

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging

None anticipated.

Section 14: TRANSPORT INFORMATION

products

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special Provisions	None
14.7 Transport in bulk according to	Not applicable
Anney II of MARPOL and the IRC	

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<u>NID</u>		
14.1	UN/ID no	Not regulated
14.2	Proper shipping name	Not regulated
14.3	Hazard Class	Not regulated
14.4	Packing Group	Not regulated
14.5	Environmental hazard	Not applicable
14.6	Special Provisions	None

ADR

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

ICAO (air)

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not applicable
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

IATA

14.1 UN/ID no	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard Class	Not regulated
14.4 Packing Group	Not regulated
Description	Not applicable
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

Section 15: REGULATORY INFORMATION

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

Chemical Name	French RG number	Title
Titanium 7440-32-6	-	-
Aluminium 7429-90-5	RG 32 RG 16,RG 16bis	-
Niobium 7440-03-1	-	-
Tungsten 7440-33-7	-	-
Molybdenum 7439-98-7	-	-
Chromium 7440-47-3	RG 10	-
Zirconium 7440-67-7	-	-
Cobalt 7440-48-4	RG 65,RG 70,RG 70bis,RG 70ter	-
Boron 7440-42-8	-	-

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 Complies

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
 28-May-2015

 Revision Date
 07-Jan-2019

Revision Note Updated Section(s): 3, 4, 5, 7, 9, 11, 12, 15.

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

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