

ICP Group Australasia Pty Ltd.

Version No: 7.14

Safety Data Sheet according to WHS and ADG requirements

Issue Date: 06/04/2020 Print Date: 08/19/2020 S.GHS.AUS.EN

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

Product Identifier

Product name	Fiberlock ABC (White, Clear, Green) 64XX series
Synonyms	Not Available
Other means of identification	Not Available

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

Relevant identified uses	Binder for Asbestos Fibers
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Details of the supplier of the safety data sheet

Registered company name	ICP Group Australasia Pty Ltd.
Address	30-32 Assembly Dr. Tullamarine VIC 3043 Australia
Telephone	1800 786 617
Fax	Not Available
Website	www.icpgroup.com
Email	sales-australia@icpgroup.com

Emergency telephone number

Association / Organisation	Chemtel		
Emergency telephone numbers	1300-954-583		
Other emergency telephone numbers	Not Available		

SECTION 2 Hazards identification

Classification of the substance or mixture Poisons Schedule Not Applicable Classification [1] Not Applicable Label elements Vot Applicable

Hazard pictogram(s)

pictogram(s) Not Applicable
Signal word Not Applicable

Hazard statement(s)

Not Applicable

Precautionary statement(s) General

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

Precautionary statement(s) Prevention

Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
1317-80-2	1-5	titanium dioxide (rutile)
25265-77-4	1-5	2.2.4-trimethyl-1.3-pentanediol monoisobutyrate
107497-96-1	0.1	azadioxabicyclooctane
1309-37-1	0.1	ferric oxide

SECTION 4 First aid measures

Description of first aid measures

Eye Contact	 If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, 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	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Firefighting measures

Extinguishing media

- Jets of water.
- Water spray or fog.

Special hazards arising from the substrate or mixture

 Fire Incompatibility
 None known.

 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.

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 corrosive fumes.
HAZCHEM	1

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.
Major Spills	Moderate hazard. ▶ Clear area of personnel and move upwind.

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. DO NOT allow clothing wet with material to stay in contact with skin 			
Other information				
Conditions for safe storage, including any incompatibilities				
Suitable container	 Polyethylene or polypropylene container. Packing as recommended by manufacturer. 			

Storage incompatibility None known

rage 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	titanium dioxide (rutile)	Titanium dioxide	10 mg/m3	Not Available	Not Available	(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Australia Exposure Standards	ferric oxide	Iron oxide fume (Fe2O3) (as Fe)	5 mg/m3	Not Available	Not Available	Not Available

Eme	rger	ncy Limits		

Ingredient	Material name		TEEL-1	TEEL-2	TEEL-3
titanium dioxide (rutile)	Titanium oxide; (Titanium dioxide)		30 mg/m3	330 mg/m3	2,000 mg/m3
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Trimethyl-1,3-pentanediol monoisobutyrate, 2,2,4-; (Texanol)		13 mg/m3	140 mg/m3	840 mg/m3
ferric oxide	Iron oxide; (Ferric oxide)		15 mg/m3	360 mg/m3	2,200 mg/m3
Ingredient	Original IDLH	Revised	IDLH		
titanium dioxide (rutile)	5,000 mg/m3	Not Avail	able		
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	Not Available Not Availab		able		
azadioxabicyclooctane	Not Available Not Ava		able		
ferric oxide	2,500 mg/m3	Not Avail	able		
Occupational Exposure Banding					
Ingredient	Occupational Exposure Band Rating	Occupa	tional Exposure B	Band Limit	
azadioxabicyclooctane	E	≤ 0.01 n	ng/m³		

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

Notes:

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.
Personal protection	
Eye and face protection	 Safety glasses with side shields. Chemical goggles.
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 NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. 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.
Body protection	See Other protection below

Other protection

Overalls.P.V.C apron.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Not Available		
Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	8.5	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	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)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	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
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable.
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

Information on toxicological effects

Inhaled	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.			
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.			
Skin Contact	The liquid may be able to be mixed with fats or oils and may degrease the dermatitis. The material is unlikely to produce an irritant dermatitis as de	The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives.		
Eye	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).			
Chronic	Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment.			
Fiberlock ABC (White, Clear,	ΤΟΧΙĊΙΤΥ	IRRITATION		
Green) 64XX series	Not Available	Not Available		
	ΤΟΧΙΟΙΤΥ	IRRITATION		
titanium dioxide (rutile)	Oral (rat) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not irritating) ^[1]		
		Skin: no adverse effect observed (not irritating) ^[1]		

	ΤΟΧΙΟΙΤΥ	IRRITATION	
2.2.4-trimethyl-1.3-nentanedial	Dermal (rabbit) LD50: >15200 mg/kg ^[2]	Eye: no adverse	effect observed (not irritating) ^[1]
	Inhalation (rat) LC50: >5.325 mg/l/6h ^[2]	Eyes - Moderate	e irritant *
monoisobutyrate	Oral (rat) LD50: 3200 mg/kg ^[2]	Skin - Slight irrit	ant *
		Skin (rabbit): mil	d ***
		Skin: no adverse	e effect observed (not irritating) ^[1]
	ΤΟΧΙΟΙΤΥ	IRRITATION	
azadioxabicyclooctane	Dermal (rabbit) LD50: >2000 mg/kg ^[2]	Not Available	
	Oral (rat) LD50: 2950 mg/kg ^[2]		
	тохісіту	IRRITATION	
terric oxide	Oral (rat) LD50: >10000 mg/kg ^[2]	Not Available	
Legend:	 Value obtained from Europe ECHA Registered Sub specified data extracted from RTECS - Register of To. 	stances - Acute toxicity 2.* Value obta xic Effect of chemical Substances	ained from manufacturer's SDS. Unless otherwise
TITANIUM DIOXIDE (RUTILE)	No significant acute toxicological data identified in literature search. The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. Exposure to titanium dioxide is via inhalation, swallowing or skin contact. When inhaled, it may deposit in lung tissue and lymph nodes causing dysfunction of the lungs and immune system. Absorption by the stomach and intestines depends on the size of the particle. Skin (human) 0.3: mg/3d-I mild		
2,2,4-TRIMETHYL- 1,3-PENTANEDIOL MONOISOBUTYRATE	Not a skin sensitiser (guinea pig, Magnusson-Kligman) *** Ames Test: negative *** Micronucleus, mouse: negative *** Not mutagenic *** No effects on fertility or foetal development seen in the rat *** * [SWIFT] ** [Eastman] *** [Perstop] The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.		
AZADIOXABICYCLOOCTANE	For azadioxabicyclooctanes: The acute oral and dermal toxicities of azadioxabicyclooctane are low. The acute inhalation toxicity showed a median lethal dose range of between 0.441 mg/L and 0.819 mg/L in males, and between 0.819 mg/L and 1.397 mg/L in females, with epistaxis, labored breathing, rales, and rhinorrhoea in all dose groups. * CCInfo		
Fiberlock ABC (White, Clear, Green) 64XX series & AZADIOXABICYCLOOCTANE	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type.		
TITANIUM DIOXIDE (RUTILE) & 2,2,4-TRIMETHYL- 1,3-PENTANEDIOL MONOISOBUTYRATE	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.		
AZADIOXABICYCLOOCTANE & FERRIC OXIDE	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.		
Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×
		legend: Y – Data either r	not available or does not fill the criteria for classification

Data available to make classification

SECTION 12 Ecological information

Toxicity					
Fiberlock ABC (White, Clear, Green) 64XX series	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
titanium dioxide (rutile)	LC50	96	Fish	>1-mg/L	2
	EC50	48	Crustacea	>1-mg/L	2
	EC50	72	Algae or other aquatic plants	>10-mg/L	2
	NOEC	72	Algae or other aquatic plants	1mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Source
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LC50	96	Fish	9.552mg/L	3
	EC50	48	Crustacea	>19mg/L	2
	EC50	96	Algae or other aquatic plants	0.789mg/L	3

	NOEC	72	Algae or other aquatic plants	2mg/L	2
	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96	Fish	28073.682mg/L	3
azadioxabicyclooctane	EC50	96	Algae or other aquatic plants	503.941mg/L	3
	LC50	96	Fish	7479.033mg/L	3
	EC50	96	Algae or other aquatic plants	193.440mg/L	3
	Endpoint	Test Duration (hr)	Species	Value	Source
	LC50	96	Fish	0.05mg/L	2
ferric oxide	EC50	48	Crustacea	5.11mg/L	2
	EC50	72	Algae or other aquatic plants	18mg/L	2
	NOEC	504	Fish	0.52mg/L	2
Legend:	Extracted from V3.12 (QSAR	n 1. IUCLID Toxicity Data 2. Europe ECHA Registe) - Aquatic Toxicity Data (Estimated) 4. US EPA. E	ered Substances - Ecotoxicological Information - Aq cotox database - Aquatic Toxicity Data 5. ECETOC	uatic Toxicity 3. E Aquatic Hazard A	PIWIN Suite

Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

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.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
titanium dioxide (rutile)	HIGH	HIGH
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW	LOW
azadioxabicyclooctane	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
titanium dioxide (rutile)	LOW (BCF = 10)
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW (LogKOW = 2.9966)
azadioxabicyclooctane	LOW (LogKOW = -1.5532)

Mobility in soil

Ingredient	Mobility
titanium dioxide (rutile)	LOW (KOC = 23.74)
2,2,4-trimethyl-1,3-pentanediol monoisobutyrate	LOW (KOC = 22.28)
azadioxabicyclooctane	LOW (KOC = 10)

SECTION 13 Disposal considerations

Waste treatment methods	
Product / Packaging disposal	 Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. 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. 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.

SECTION 14 Transport information

Labels Required		
Marine Pollutant	NO	
HAZCHEM	1	

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

SECTION 15 Regulatory information

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

titanium dioxide (rutile) is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B : Possibly carcinogenic to humans International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

2,2,4-trimethyl-1,3-pentanediol monoisobutyrate is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

azadioxabicyclooctane is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

ferric oxide is found on the following regulatory lists

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5 Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6 Australian Inventory of Industrial Chemicals (AIIC)

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

National Inventory Status

National Inventory	Status		
Australia - AIIC	Yes		
Australia Non-Industrial Use	No (titanium dioxide (rutile); 2,2,4-trimethyl-1,3-pentanediol monoisobutyrate; azadioxabicyclooctane; ferric oxide)		
Canada - DSL	Yes		
Canada - NDSL	No (titanium dioxide (rutile); 2,2,4-trimethyl-1,3-pentanediol monoisobutyrate; azadioxabicyclooctane; ferric oxide)		
China - IECSC	Yes		
Europe - EINEC / ELINCS / NLP	Yes		
Japan - ENCS	No (azadioxabicyclooctane)		
Korea - KECI	Yes		
New Zealand - NZIoC	Yes		
Philippines - PICCS	Yes		
USA - TSCA	Yes		
Taiwan - TCSI	Yes		
Mexico - INSQ	Yes		
Vietnam - NCI	Yes		
Russia - ARIPS	Yes		
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)		

SECTION 16 Other information

Revision Date	06/04/2020
Initial Date	07/18/2017

CONTACT POINT

PLEASE NOTE THAT TITANIUM DIOXIDE IS NOT PRESENT IN CLEAR OR NEUTRAL BASES

SDS Version Summary

Version	Issue Date	Sections Updated
6.14.1.1.1	06/04/2020	Acute Health (skin), Chronic Health, Classification, Engineering Control, Environmental, Fire Fighter (fire/explosion hazard), Ingredients

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.

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 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

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