

IAQ 6000 White 8360 ICP Building Solutions Group / Fiberlock

Version No: 2.5.4.7

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: 06/29/2021 Print Date: 06/29/2021 S.GHS.USA.EN

SECTION 1 Identification

Product Identifier	
Product name	IAQ 6000 White 8360
Synonyms	Not Available
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses	Use according to manufacturer's directions.
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Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	ICP Building Solutions Group / Fiberlock
Address	150 Dascomb Road Andover MA 01810 United States
Telephone	978 623 9980 866 667 5119
Fax	Not Available
Website	www.icpgroup.com
Email	sds@icpgroup.com

Emergency phone number

Association / Organisation	ChemTel
Emergency telephone numbers	800-255-3924
Other emergency telephone numbers	813-248-0585

SECTION 2 Hazard(s) identification

Classification of the substance or mixture

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification Not Applicable

Label elements

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Hazard pictogram(s)	Not Applicable
Signal word	Not Applicable

Hazard statement(s)

Not Applicable

Hazard(s) not otherwise classified Not Applicable

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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
13463-67-7*	10-15	titanium dioxide
1314-13-2	<3	zincoxide
1344-28-1.	0.1-0.5	aluminium oxide
13463-41-7	0.1-0.5	zinc pyrithione
124-68-5	<1	monoisobutanolamine
7320-34-5	<1	potassium pyrophosphate

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

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 or hair contact occurs: 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.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Fire-fighting 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

Fire Incompatibility None known.

Special protective equipment and precautions for fire-fighters

Fire Fighting	 Use water delivered as a fine spray to control fire and cool adjacent area. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location.
Fire/Explosion Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of: metal oxides When aluminium oxide dust is dispersed in air, firefighters should wear protection against inhalation of dust particles, which can also contain hazardous substances from the fire absorbed on the alumina particles.

SECTION 6 Accidental release measures

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.
Major Spills	Minor hazard. Clear area of personnel. Alert Fire Brigade and tell them location and nature of hazard.

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

SECTION 7 Handling and storage

Precautions for safe handling

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Safe handling	 Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area.
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	For aluminas (aluminium oxide): Incompatible with hot chlorinated rubber. In the presence of chlorine trifluoride may react violently and ignite. -May initiate explosive polymerisation of olefin oxides including ethylene oxide. None known

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
JS OSHA Permissible Exposure .imits (PELs) Table Z-1	titanium dioxide	Titanium dioxide - Total dust	15 mg/m3	Not Available	Not Available	Not Available
JS NIOSH Recommended Exposure Limits (RELs)	titanium dioxide	Titanium dioxide	Not Available	Not Available	Not Available	Ca; See Appendix A
JS ACGIH Threshold Limit /alues (TLV)	titanium dioxide	Titanium dioxide	10 mg/m3	Not Available	Not Available	(A4)
JS OSHA Permissible Exposure Limits (PELs) Table Z-3	zinc oxide	Inert or Nuisance Dust: Respirable fraction	5 mg/m3 / 15 mppcf	Not Available	Not Available	Not Available
JS OSHA Permissible Exposure .imits (PELs) Table Z-3	zinc oxide	Inert or Nuisance Dust: Total Dust	15 mg/m3 / 50 mppcf	Not Available	Not Available	Not Available
JS OSHA Permissible Exposure .imits (PELs) Table Z-1	zinc oxide	Zinc oxide- Total dust	15 mg/m3	Not Available	Not Available	Not Available
JS OSHA Permissible Exposure .imits (PELs) Table Z-1	zinc oxide	Zinc oxide fume	5 mg/m3	Not Available	Not Available	Not Available
JS OSHA Permissible Exposure .imits (PELs) Table Z-1	zinc oxide	Zinc oxide- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
JS NIOSH Recommended Exposure Limits (RELs)	zinc oxide	Zinc oxide - Dust	5 mg/m3	Not Available	15 mg/m3	Not Available
JS NIOSH Recommended Exposure Limits (RELs)	zinc oxide	Zinc oxide - Fume	5 mg/m3	10 mg/m3	Not Available	Not Available
JS ACGIH Threshold Limit /alues (TLV)	zinc oxide	Zinc oxide (Respirable particulate matter)	2 mg/m3	10 mg/m3	Not Available	Not Available
JS OSHA Permissible Exposure .imits (PELs) Table Z-1	aluminium oxide	alpha-Alumina- Respirable fraction	5 mg/m3	Not Available	Not Available	Not Available
JS OSHA Permissible Exposure .imits (PELs) Table Z-1	aluminium oxide	alpha-Alumina- Total dust	15 mg/m3	Not Available	Not Available	Not Available
JS NIOSH Recommended Exposure Limits (RELs)	aluminium oxide	alpha-Alumina	Not Available	Not Available	Not Available	See Appendix D

	Ingredient	Material name		TWA	STEL	Peak	Notes	
US ACGIH Threshold Limit Values (TLV)	aluminium oxide	Aluminum metal and (Respirable particulat		1 mg/m3	Not Available	Not Available	A4	
Emergency Limits								
Ingredient	TEEL-1		TEEL-2		TEEL-3			
itanium dioxide	30 mg/m3		330 mg/m3	2,000 mg/m3				
zinc oxide	10 mg/m3		15 mg/m3	2,500 mg/m3				
aluminium oxide	15 mg/m3		170 mg/m3	990 mg/m3				
nonoisobutanolamine	17 mg/m3		190 mg/m3	570 mg/m3				
potassium pyrophosphate	61 mg/m3		680 mg/m3	1,200 mg/m3				
Ingredient	Original IDLH			Revised IDLH	Revised IDLH			
titanium dioxide	5,000 mg/m3			Not Available				
zinc oxide	500 mg/m3			Not Available				
aluminium oxide	Not Available			Not Available				
zinc pyrithione	Not Available			Not Available				
monoisobutanolamine	Not Available			Not Available				
potassium pyrophosphate	Not Available			Not Available				
Occupational Exposure Banding	J							
Ingredient	Occupational E	xposure Band Rating		Occupational	Exposure Band	Limit		
zinc pyrithione	E			≤ 0.01 mg/m ³				
monoisobutanolamine	E			≤ 0.01 mg/m ³				
potassium pyrophosphate	E			≤ 0.01 mg/m ³				
			cess of assigning chemicals	into specific categorie	s or bands based	on a chemical's p	otency and the	
xposure controls		outcomes associated wit	cess of assigning chemicals h exposure. The output of th re expected to protect worke	is process is an occup				
xposure controls Appropriate engineering controls	Engineering com be highly effecting The basic types	trols are used to remove of engineering controls a	th exposure. The output of the re expected to protect worked to protect worked to a protect worked to a hazard or place a barrier and will typically be independent.	is process is an occup r health. between the worker a dent of worker interac	nd the hazard. We	oand (OEB), whic	h corresponds to	
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Appropriate engineering controls Personal protection	 range of exposu Engineering com be highly effecting The basic types Process controls Process controls<td>trols are used to remove re concentrations that and trols are used to remove re in protecting workers of engineering controls is which involve changing the which involve changing the which involve changing the swith side shields the swith side shields the ses may pose a special I of lenses or restrictions</td><td>th exposure. The output of the re expected to protect worked a hazard or place a barrier and will typically be independent are: the way a job activity or protect work of the way a job activity or protect work of the way a job activity or protect way a job activity or protect</td><td>is process is an occup r health. between the worker a dent of worker interac ocess is done to reduc</td><td>nd the hazard. We tions to provide this e the risk.</td><td>band (OEB), whic</td><td>eering controls c</td>	trols are used to remove re concentrations that and trols are used to remove re in protecting workers of engineering controls is which involve changing the which involve changing the which involve changing the swith side shields the swith side shields the ses may pose a special I of lenses or restrictions	th exposure. The output of the re expected to protect worked a hazard or place a barrier and will typically be independent are: the way a job activity or protect work of the way a job activity or protect work of the way a job activity or protect	is process is an occup r health. between the worker a dent of worker interac ocess is done to reduc	nd the hazard. We tions to provide this e the risk.	band (OEB), whic	eering controls c	
Personal protection	 range of exposure Engineering combe highly effective The basic types Process controls Process controls Safety glass Chemical get Contact lense the wearing See Hand proteet Wear general protection The selection of manufacturer. Wear general protection 	trols are used to remove re concentrations that and trols are used to remove re in protecting workers of engineering controls is which involve changing which involve changing the which involve changing the which involve changing the swith side shields to flenses or restrictions the plove a special I of lenses or restrictions the below the the chemical is a p to the checked prior to through time for substati	th exposure. The output of the re expected to protect worked is a hazard or place a barrier and will typically be independent are: g the way a job activity or protect work of the way a job activity or protect work of the way a job activity or protect of the way activi	is process is an occup r health. between the worker a dent of worker interac ocess is done to reduc nay absorb and conce or each workplace or t al, but also on further r inces, the resistance of	nd the hazard. We tions to provide this e the risk. ntrate irritants. A w ask.	ich vary from ma	eering controls contr	
Appropriate engineering controls Personal protection Eye and face protection Skin protection	 range of exposure Engineering combe highly effective The basic types Process controls Process controls Safety glass Chemical go Contact lense Contact lense the wearing See Hand proteet Wear general protection of manufacturer. Wear data therefore of the exact break 	trols are used to remove re concentrations that and trols are used to remove re in protecting workers of engineering controls is which involve changing which involve changing the swith side shields beggles. ses may pose a special I of lenses or restrictions ction below otective gloves, eg. light suitable gloves does no three the chemical is a p e to be checked prior to through time for substan- noice.	th exposure. The output of the re expected to protect worked is a hazard or place a barrier and will typically be independent are: and will typically be independent of the way a job activity or protect worked is a protect work of the way a job activity or protect of the way a job activity of the way a job activity or protect of the way a job activity or protect of the way a job activity of the way a job activity or protect of the way activity or protect	is process is an occup r health. between the worker a dent of worker interac ocess is done to reduc nay absorb and conce or each workplace or t al, but also on further r inces, the resistance of	nd the hazard. We tions to provide this e the risk. ntrate irritants. A w ask.	ich vary from ma	eering controls of tection.	

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Light sensitive.		
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)	Not Available	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 (%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
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	0 1	ects or irritation of the respiratory tract (as classified by EC Directives using animal at exposure be kept to a minimum and that suitable control measures be used in an	
Ingestion	The material has NOT been classified by EC Directives o corroborating animal or human evidence.	r other classification systems as "harmful by ingestion". This is because of the lack of	
Skin Contact	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. Though considered non-harmful, slight irritation may result from contact because of the abrasive nature of the aluminium oxide particles. Thus it may cause itching and skin reaction and inflammation.		
Eye	Although the liquid is not thought to be an irritant (as clas characterised by tearing or conjunctival redness (as with	sified by EC Directives), direct contact with the eye may produce transient discomfort windburn).	
Chronic	models); nevertheless exposure by all routes should be n	tides may cause lung disease and cancer, depending on the size of the particle. The	
	TOXICITY	IRRITATION	
IAQ 6000 White 8360	Not Available	Not Available	
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	Inhalation (Rat)TCLo: 0.04 mg/kg ^[2]	Eye: no adverse effect observed (not irritating) ^[1]	
	Oral (Mouse)LD50; >10000 mg/kg * ^[2]	Skin (human): 0.3 mg /3D (int)-mild *	
titanium dioxide	Oral (Mouse)TDLo: 0.0032 mg/kg ^[2]	Skin: no adverse effect observed (not irritating) ^[1]	
	Oral (Rat)LD50; >20000 mg/kg * ^[2]		
	Oral (Rat)TDLo: 60000 mg/kg ^[2]		
	ΤΟΧΙΟΙΤΥ	IRRITATION	
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (rabbit) : 500 mg/24 h - mild	
zinc oxide	Inhalation(Rat) LC50; >1.79 mg/l4h ^[1]	Eye: no adverse effect observed (not irritating) ^[1]	
	Oral(Rat) LD50; >5000 mg/kg ^[1]	Skin (rabbit) : 500 mg/24 h- mild	
		Skin: no adverse effect observed (not irritating) ^[1]	

	TOXICITY	IRRITATION
aluminium oxide	Inhalation(Rat) LC50; >2.3 mg/l4h ^[1]	Eye: no adverse effect observed (not irritating) ^[1]
	Oral(Rat) LD50; >2000 mg/kg ^[1]	Skin: no adverse effect observed (not irritating) $\left[1 \right]$
	ΤΟΧΙΟΙΤΥ	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Eye (rabbit): 1 mg/48h Irritant
zinc pyrithione	Inhalation(Rat) LC50; 0.14 mg/L4h ^[2]	
	Oral(Rat) LD50; 221 mg/kg ^[1]	
	ΤΟΧΙΟΙΤΥ	IRRITATION
monoisobutanolamine	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Not Available
	Oral(Mouse) LD50; ~2150 mg/kg ^[2]	
	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Eye: adverse effect observed (irritating) ^[1]
potassium pyrophosphate	Inhalation(Rat) LC50; >0.58 mg/l4h ^[1]	Skin: no adverse effect observed (not irritating) ^[1]
	Oral(Rat) LD50; >300<2000 mg/kg ^[1]	
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute to specified data extracted from RTECS - Register of Toxic Effect of chemi	
titanium dioxide	* IUCLID Laboratory (in vitro) and animal studies show, exposure to the material r producing mutation. Exposure to titanium dioxide is via inhalation, swallowing or skin contact dysfunction of the lungs and immune system. Absorption by the stomaci outermost layer of the skin, suggesting that healthy skin may be an effect The material may produce moderate eye irritation leading to inflammatic conjunctivitis.	t. When inhaled, it may deposit in lung tissue and lymph nodes causing h and intestines depends on the size of the particle. It penetrated only the ctive barrier.

 ZINC PYRITHIONE
 Animal testing shows that pyrithiones at sufficient doses can cause vomiting, bleeding of the mucous membranes of the stomach and weight loss and anaemia and paralysis at very high doses, and in extreme cases may be lethal. Although it is very poorly absorbed through skin, dermal exposure at very high doses can potentially cause similar effects. Chronic exposure, in animal testing, has been shown to potentially damage the nervous system.

 ZINC PYRITHIONE
 Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).

 NOAEL: 11.0 mg/kg/day cynomolgus monkey * [* = Arch Chemical] Acute pulmonary oedema, dyspnea, weight loss or decreased weight gain, recordings from specific areas of the CNS, mydriasis, somnolence, changes in motor activity, recording from peripheral motor nerve, muscle

WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.

weakness, spastic paralysis, reproductive system tumours, retinal changes, diarrhoea, foetoxicity, specific developmental abnormalities (musculoskeletal system, central nervous system, effects on newborn, foetolethality recorded. TRIS AMINO and its surrogate chemicals have very little, if any, toxicity. They are mildly irritating to eyes at moderate concentrations, and do not MONOISOBUTANOLAMINE cause allergic skin reactions. Ingestion of relatively high dosages can cause liver changes. No data available. Data for sodium analogue only. tetrasodium pyrophosphate For pyrophosphate salts: POTASSIUM Oral toxicity was for three pyrophosphate (diphosphate) salts were generally around 2000 mg/kg bw, but mortality occurred at sufficiently high PYROPHOSPHATE doses. Acute dermal toxicity was not found for any of the three substances, all animals survived doses up to 7.96 g/kg bw of the respective diphosphate. This underlines the low potential of the three diphosphates to penetrate the skin. 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 titanium dioxide & known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main POTASSIUM criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent PYROPHOSPHATE asthma-like symptoms within minutes to hours of a documented exposure to the irritant. titanium dioxide & No significant acute toxicological data identified in literature search. ALUMINIUM OXIDE titanium dioxide & ZINC The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of OXIDE vesicles, scaling and thickening of the skin. Acute Toxicity × Carcinogenicity × × Skin Irritation/Corrosion × Reproductivity × Serious Eye Damage/Irritation × STOT - Single Exposure

Respiratory or Skin sensitisation X Stor - Repeated Exposure X Mutagenicity Aspiration Hazard Legend: X - Data either not available or does not fill the criteria for classification or doe

SECTION 12 Ecological information

Toxicity

Species

tion (hr)	Species Algae or other aquatic pl Fish Crustacea Fish Crustacea Algae or other aquatic pl Species	lants :	Value 3.75-7.58mg/l <1.1-9.6 1.9mg/l 1.85-3.06mg/l 0.02mg/l 179.05mg/l	Sourc 4 7 2 4 4
ion (hr)	Fish Crustacea Fish Crustacea Algae or other aquatic pl Species		<1.1-9.6 1.9mg/l 1.85-3.06mg/l 0.02mg/l	7 2 4 4
ion (hr)	Crustacea Fish Crustacea Algae or other aquatic pl Species		1.9mg/l 1.85-3.06mg/l 0.02mg/l	2 4 4
ion (hr)	Fish Crustacea Algae or other aquatic pl Species		1.85-3.06mg/l 0.02mg/l	4
ion (hr)	Crustacea Algae or other aquatic pl Species	(0.02mg/l	4
ion (hr)	Algae or other aquatic pl			
ion (hr)	Species	lants	179.05mg/l	
tion (hr)				2
		Va	lue	Sourc
	Algae or other aquatic pla	ints 0.0	36-0.049mg/l	4
	Fish	19-	-110	7
	Fish	0.9	27-2.589mg/l	4
	Crustacea	0.3	01-0.667mg/l	4
	Algae or other aquatic pla	ints 0.0	05mg/l	2
	Algae or other aquatic pla	ints 0.3	img/l	2
tion (hr)	Species	Va	lue	Sour
	Algae or other aquatic pla	ints 0.2	0.2mg/l	
	Crustacea	1.5	1.5mg/l	
	Fish	0.0	0.078-0.108mg/l	
	Algae or other aquatic pla	ints >10	>100mg/l	
	Algae or other aquatic pla	ints 0.0	124mg/l	2
on (hr)	Species	Val	ue	Sour
	Algae or other aquatic plan	nts 0.00	01mg/L	4
	Fish	52-180		7
	Crustacea	0.00)8mg/L	4
	Fish	0.00	03-0.004mg/L	4
	Algae or other aquatic plan	nts <0.0	001mg/L	4
	Algae or other aquatic plan	nts <0.0	001mg/L	4
n (hr)	Species		Value	Sourc
	Algae or other aquatic	plants	402mg/l	2
	Fish		100mg/l	1
	Crustacea		193mg/l	1
	Crustacea		100mg/l	1
on (hr)	Species	Valu	ue	Sourc
	Algae or other aquatic plan	nts >=1	00<=200mg/l	2
	Algae or other aquatic plan	nts >10	0mg/l	2
	Fish	>10	0mg/l	2
	Crustacea	>10	0mg/l	2
		Algae or other aquatic plan Fish Crustacea Europe ECHA Registered Substances - Ecotoxico	Algae or other aquatic plants >10 Fish >10 Crustacea >10 Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic	Algae or other aquatic plants >100mg/l Fish >100mg/l

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.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
titanium dioxide	HIGH	HIGH
monoisobutanolamine	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
titanium dioxide	LOW (BCF = 10)
zinc oxide	LOW (BCF = 217)
zinc pyrithione	LOW (BCF = 240)

Ingredient	Bioaccumulation
monoisobutanolamine	LOW (BCF = 330)
NO - 1, 1114 - 111 11	
Mobility in soil	
Ingredient	Mobility
titanium dioxide	LOW (KOC = 23.74)
monoisobutanolamine	MEDIUM (KOC = 2.196)

SECTION 13 Disposal considerations

Vaste treatment methods Product / Packaging disposal	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. 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. 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).
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SECTION 14 Transport information

Labels Required	
Marine Pollutant	NO

Land transport (DOT): 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
titanium dioxide	Not Available
zinc oxide	Not Available
aluminium oxide	Not Available
zinc pyrithione	Not Available
monoisobutanolamine	Not Available
potassium pyrophosphate	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
titanium dioxide	Not Available
zinc oxide	Not Available
aluminium oxide	Not Available
zinc pyrithione	Not Available
monoisobutanolamine	Not Available
potassium pyrophosphate	Not Available

SECTION 15 Regulatory information

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

titanium dioxide is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List	US ACGIH Threshold Limit Values (TLV) - Notice of Intended Changes
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US DOE Temporary Emergency Exposure Limits (TEELs)
Monographs	US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	Inactive) Rule
Monographs - Group 2B: Possibly carcinogenic to humans	US NIOSH Carcinogen List
International WHO List of Proposed Occupational Exposure Limit (OEL) Values for	US NIOSH Recommended Exposure Limits (RELs)
Manufactured Nanomaterials (MNMS)	US OSHA Permissible Exposure Limits (PELs) Table Z-1
US - California Proposition 65 - Carcinogens	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US ACGIH Threshold Limit Values (TLV)	
US ACGIH Threshold Limit Values (TLV) - Carcinogens	
zinc oxide is found on the following regulatory lists	
US ACGIH Threshold Limit Values (TLV)	US NIOSH Recommended Exposure Limits (RELs)
US CWA (Clean Water Act) - Priority Pollutants	US OSHA Permissible Exposure Limits (PELs) Table Z-1
US CWA (Clean Water Act) - Toxic Pollutants	US OSHA Permissible Exposure Limits (PELs) Table Z-3
US DOE Temporary Emergency Exposure Limits (TEELs)	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US EPA Integrated Risk Information System (IRIS)	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US EPCRA Section 313 Chemical List	
aluminium oxide is found on the following regulatory lists	
Chemical Footprint Project - Chemicals of High Concern List	US NIOSH Recommended Exposure Limits (RELs)
US ACGIH Threshold Limit Values (TLV)	US OSHA Permissible Exposure Limits (PELs) Table Z-1
US ACGIH Threshold Limit Values (TLV) - Carcinogens	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US DOE Temporary Emergency Exposure Limits (TEELs)	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US EPCRA Section 313 Chemical List	
zinc pyrithione is found on the following regulatory lists	
US CWA (Clean Water Act) - Priority Pollutants	US EPCRA Section 313 Chemical List
US CWA (Clean Water Act) - Toxic Pollutants	US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-
US EPA Integrated Risk Information System (IRIS)	Inactive) Rule
	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
monoisobutanolamine is found on the following regulatory lists	
US DOE Temporary Emergency Exposure Limits (TEELs)	US TSCA Chemical Substance Inventory - Interim List of Active Substances
US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory	
-	
potassium pyrophosphate is found on the following regulatory lists	
US DOE Temporary Emergency Exposure Limits (TEELs)	US TSCA Chemical Substance Inventory - Interim List of Active Substances

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

Section 311/312 hazard categories

Section 317/312 hazard categories	
Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	No
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	No
Acute toxicity (any route of exposure)	No
Reproductive toxicity	No
Skin Corrosion or Irritation	No
Respiratory or Skin Sensitization	No
Serious eye damage or eye irritation	
Specific target organ toxicity (single or repeated exposure)	
Aspiration Hazard	
Germ cell mutagenicity	No
Simple Asphyxiant	No
Hazards Not Otherwise Classified	No

None Reported

State Regulations

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

US - California Proposition 65 - Carcinogens: Listed substance

titanium dioxide

National Inventory Status

National Inventory	Status	
Australia - AIIC / Australia Non-Industrial Use	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (titanium dioxide; aluminium oxide; zinc pyrithione; monoisobutanolamine; potassium pyrophosphate)	
China - IECSC	Yes	
Europe - EINEC / ELINCS / NLP	Yes	
Japan - ENCS	lo (potassium pyrophosphate)	
Korea - KECI	Yes	
New Zealand - NZIoC	Yes	
Philippines - PICCS	Yes	
USA - TSCA	Yes	
Taiwan - TCSI	Yes	
Mexico - INSQ	No (potassium pyrophosphate)	
Vietnam - NCI	Yes	
Russia - FBEPH	No (zinc pyrithione)	
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	06/29/2021
Initial Date	02/01/2021

CONTACT POINT

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

SDS Version Summary

Version	Date of Update	Sections Updated
1.5.3.1	05/10/2021	Regulation Change
1.5.4.1	05/24/2021	Regulation Change
1.5.4.2	05/30/2021	Template Change
1.5.4.3	06/04/2021	Template Change
1.5.4.4	06/05/2021	Template Change
1.5.4.5	06/09/2021	Template Change
1.5.4.6	06/11/2021	Template Change
1.5.4.7	06/15/2021	Template Change
1.5.4.7	06/29/2021	Classification, Environmental, 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. Risks may be determined by reference to Exposures Scenarios.

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_\circ

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 and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substances Nuentory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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