AH 26 Powder

Dentsply (Australia) Pty Ltd

Chemwatch Hazard Alert Code: 2

Issue Date: 08/04/2016 Print Date: 27/06/2017 S.GHS.AUS.EN

Chemwatch: 4993-64 Version No: 6.1.1.1 Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	AH 26 Powder
Synonyms	Not Available
Other means of identification	Not Available

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

Relevant identified uses Root canal filling material.

Details of the supplier of the safety data sheet

Registered company name	Dentsply (Australia) Pty Ltd				
Address	11-21 Gilby Road Mount Waverley VIC 3149 Australia				
Telephone	1300 55 29 29				
Fax	1300 55 31 31				
Website	www.dentsply.com.au				
Email	clientservices@dentsplysirona.com				

Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	1300 55 29 29
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max	
Flammability	1 📃	i i	
Toxicity	0		0 = Minimum
Body Contact	1	1	1 = Low 2 = Moderate
Reactivity	1		3 = High
Chronic	2		4 = Extreme

Poisons Schedule	Not Applicable			
Classification ^[1]	Respiratory Sensitizer Category 1, Skin Sensitizer Category 1, Acute Aquatic Hazard Category 3, Chronic Aquatic Hazard Category 3			
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI			

Label elements

 Hazard pictogram(s)
 Image: Comparison of the symptoms of the symptomsymme of the symptoms of the symptomsymme of

Precautionary statement(s) Prevention

P261 Avoid breathing dust/fumes. P280 Wear protective gloves/protective clothing/eye protection/face protection. P285 In case of inadequate ventilation wear respiratory protection. P273 Avoid release to the environment.

Precautionary statement(s) Response

P304+P340	INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.			
P342+P311	experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.			
P363	Wash contaminated clothing before reuse.			
P302+P352	IF ON SKIN: Wash with plenty of soap and water.			

Precautionary statement(s) Storage Not Applicable

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
100-97-0	25-50	hexamine
13463-67-7	3-<10	titanium dioxide
7440-22-4	1-<2.5	silver
Not Available	10-20	Ingredients determined not to be hazardous

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 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

- 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	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result					
Advice for firefighters						
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area. 					
Fire/Explosion Hazard	 Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%) - according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions). Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited - particles exceeding this limit will generally not form flammable dust clouds; once initiated, 					

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 however, larger particles up to 1400 microns diameter will contribute to the propagation of an explosion.

 Combustion products include:

 carbon monoxide (CO)

 carbon dioxide (CO2)

 formaldehyde

 nitrogen oxides (NOx)

 metal oxides

 other pyrolysis products typical of burning organic material.

 May emit poisonous fumes.

 May emit corrosive fumes.

 May emit corrosive fumes.

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 dust and contact with skin and eyes. Wear protective clothing, gloves, safety glasses and dust respirator. Use dry clean up procedures and avoid generating dust.
Major Spills	Moderate hazard. CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions) Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame. Establish good housekeeping practices. Remove dust accumulations on a regular basis by vacuuming or gentle sweeping to avoid creating dust clouds. 			
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. 			
Conditions for safe storage, including any incompatibilities				
Suitable container	 Polyethylene or polypropylene container. Check all containers are clearly labelled and free from leaks. 			

Storage incompatibility
Avoid reaction with oxidising agents

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	Titanium dioxide	10 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	silver	Silver, metal	0.1 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
hexamine	Hexamethylenetetraamine; (Methenamine)	55 mg/m3	610 mg/m3	3,600 mg/m3
titanium dioxide	Titanium oxide; (Titanium dioxide)	30 mg/m3	330 mg/m3	2,000 mg/m3
silver	Silver	0.3 mg/m3	170 mg/m3	990 mg/m3

Ingredient	Original IDLH	Revised IDLH
hexamine	Not Available	Not Available
titanium dioxide	N.E. mg/m3 / N.E. ppm	5,000 mg/m3
silver	N.E. mg/m3 / N.E. ppm	10 mg/m3
Ingredients determined not to be hazardous	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
Personal protection	
Eye and face protection	 Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	 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. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present. polychloroprene. nitrile rubber.
Body protection	See Other protection below
Other protection	 Overalls. P.V.C. apron. Barrier cream.
Thermal hazards	Not Available

Respiratory protection

Particulate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	-AUS P2	-	-PAPR-AUS / Class 1 P2
up to 50 x ES	-	-AUS / Class 1 P2	-
up to 100 x ES	-	-2 P2	-PAPR-2 P2 ^

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

• Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.

The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).

Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.

Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.

Use approved positive flow mask if significant quantities of dust becomes airborne.

Try to avoid creating dust conditions.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Yellow, powder with a characteristic odour; partly soluble in water.		
Physical state	Divided Solid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	390

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 Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Partly miscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. 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

Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.		
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.		
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. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.		
The material may be irritating to the eye, with prolonged contact can	using inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.	
Inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis, caused by particles less than 0.5 micron penetrating and remaining in the lung. Respiratory sensitisation may result in allergic/asthma like responses; from coughing and minor breathing difficulties to bronchitis with wheezing, gasping.		
	IRRITATION	
Not Available	Not Available	
ΤΟΧΙΟΙΤΥ	IRRITATION	
dermal (rat) LD50: >2000 mg/kg ^[1]	Not Available	
Oral (rat) LD50: 9200 mg/kg ^[1]		
ΤΟΧΙΟΙΤΥ	IRRITATION	
Inhalation (rat) LC50: >2.28 mg/l/4hr ^[1]	Skin (human): 0.3 mg /3D (int)-mild *	
Inhalation (rat) LC50: >3.56 mg/l/4hr ^[1]		
Inhalation (rat) LC50: >6.82 mg/l/4hr ^[1]		
Oral (rat) LD50: >2000 mg/kg ^[1]		
TOXICITY	IRRITATION	
	If prior damage to the circulatory or nervous systems has occurred or individuals who may be exposed to further risk if handling and use of in excessive exposures. The material has NOT been classified by EC Directives or other classified by EC Directives or other classified animal or human evidence. The material may cause skin irritation after prolonged or repeated escaling and thickening of the skin. Open cuts, abraded or irritated skin should not be exposed to this most Entry into the blood-stream, through, for example, cuts, abrasions or of the material may be irritating to the eye, with prolonged contact card Inhaling this product is more likely to cause a sensitisation reaction Skin contact with the material is more likely to cause a sensitisation Long term exposure to high dust concentrations may cause change and remaining in the lung. Respiratory sensitisation may result in allergic/asthma like response TOXICITY Not Available TOXICITY Inhalation (rat) LD50: >2000 mg/kg ^[1] Oral (rat) LD50: >2.28 mg/l/4hr ^[1] Inhalation (rat) LC50: >3.56 mg/l/4hr ^[1] Inhalation (rat) LC50: >6.82 mg/l/4hr ^[1] Oral (rat) LD50: >2000 mg/kg ^[1]	

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		rom manufacturer's SDS. Unless otherwise specified data
Contact allergies quickly manifest themselves as contact ecze a cell-mediated (T lymphocytes) immune reaction of the delay reactions. Allergic reactions involving the respiratory tract are usually du allergen and period of exposure often determine the severity of irritants may aggravate symptoms. Allergy causing activity is of Attention should be paid to atopic diathesis, characterised by i Exogenous allergic alveolitis is induced essentially by allerger involved. Such allergy is of the delayed type with onset up to for Formaldehyde generators (releasers) are often used as prese labelled with the warning sign "contains formaldehyde" where the level of free formaldehyde in the products is always low bu However there is a concern that formaldehyde generators car containing amines. Large quantities of hexamine (syn. hexamethylenetetramine, F other diverse applications. Excessive exposure to solid hexam hexamine produces a positive Ames test, most animal studies of	ema, more rarely as urticaria or Quin red type. Other allergic skin reactions is to interactions between IgE antibu- f symptoms. Some people may be ge due to interactions with proteins. increased susceptibility to nasal infla n specific immune-complexes of the pur hours following exposure. invatives. The maximum authorised or the concentration exceeds 0.05%. Ti ut sufficient to inhibit microbial growth n produce amines capable of causing HMT) are used in the foundry, tyre an nine or its vapour has been reported have shown hexamine to be of very I	cke's oedema. The pathogenesis of contact eczema involves s, e.g. contact urticaria, involve antibody-mediated immune odies and allergens and occur rapidly. Allergic potential of the enetically more prone than others, and exposure to other mmation, asthma and eczema. IgG type; cell-mediated reactions (T lymphocytes) may be concentration of free formaldehyde is 0.2% and must be the use of formaldehyde-releasing preservatives ensures that h - it disrupts metabolism to cause death of the organism. g cancers (nitrosamines) when used in formulations ind rubber, and phenol/ formaldehyde resins industries and in to cause dermatitis and respiratory allergies. Although low genetic risk even in very high doses. The effectiveness of
The material may cause skin irritation after prolonged or repeat scaling and thickening of the skin. Exposure to titanium dioxide is via inhalation, swallowing or sk the lungs and immune system. Absorption by the stomach and suggesting that healthy skin may be an effective barrier.	ated exposure and may produce on in contact. When inhaled, it may de d intestines depends on the size of th	contact skin redness, swelling, the production of vesicles, posit in lung tissue and lymph nodes causing dysfunction of e particle. It penetrated only the outermost layer of the skin,
		0
		0
0	Reproductivity	
\odot	STOT - Single Exposure	0
¥	STOT - Repeated Exposure	0
0	A	
0	Aspiration Hazard	\otimes
	extracted from RTECS - Register of Toxic Effect of chemical The following information refers to contact allergens as a groc Contact allergies quickly manifest themselves as contact ecze a cell-mediated (T lymphocytes) immune reaction of the delay reactions. Allergic reactions involving the respiratory tract are usually du allergen and period of exposure often determine the severity of irritants may aggravate symptoms. Allergy causing activity is Attention should be paid to atopic diathesis, characterised by Exogenous allergic alveolitis is induced essentially by allerger involved. Such allergy is of the delayed type with onset up to for Formaldehyde generators (releasers) are often used as prese labelled with the warning sign "contains formaldehyde" where the level of free formaldehyde in the products is always low by However there is a concern that formaldehyde generators can containing amines. Large quantities of hexamine (syn. hexamethylenetetramine, I other diverse applications. Excessive exposure to solid hexam hexamine produces a positive Ames test, most animal studies hexamine as an antibacterial agent has been attributed to its s The material may produce moderate eye irritation leading to it The material may cause skin irritation after prolonged or reper scaling and thickening of the skin. Exposure to titanium dioxide is via inhalation, swallowing or ski the lungs and immune system. Absorption by the stomach and suggesting that healthy skin may be an effective barrier. WARNING: This substance has been classified by the IARC * IUCLID	Allergic reactions involving the respiratory tract are usually due to interactions between IgE antibu allergen and period of exposure often determine the severity of symptoms. Some people may be ge irritants may aggravate symptoms. Allergy causing activity is due to interactions with proteins. Attention should be paid to atopic diathesis, characterised by increased susceptibility to nasal infla Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the involved. Such allergy is of the delayed type with onset up to four hours following exposure. Formaldehyde generators (releasers) are often used as preservatives. The maximum authorised of labelled with the warning sign "contains formaldehyde" where the concentration exceeds 0.05%. T the level of free formaldehyde in the products is always low but sufficient to inhibit microbial growth However there is a concern that formaldehyde generators can produce arnines capable of causin containing amines. Large quantities of hexamine (syn. hexamethylenetetramine, HMT) are used in the foundry, tyre ar other diverse applications. Excessive exposure to solid hexamine or its vapour has been reported hexamine produces a positive Ames test, most animal studies have shown hexamine to be of very hexamine as an antibacterial agent has been attributed to its slow hydrolysis to ammonia and forma The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged The material may cause skin irritation after prolonged or repeated exposure and may produce on scaling and thickening of the skin. Exposure to titanium dioxide is via inhalation, swallowing or skin contact. When inhaled, it may de the lungs and immune system. Absorption by the stomach and intestines depends on the size of the suggesting that healthy skin may be an effective barrier. WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogen • IUCLID Carcinogenicity STOT - Single Exposure

end: X − Data available but does not fill the cri → − Data available to make classification

S – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity ENDPOINT TEST DURATION (HR) SPECIES VALUE SOURCE AH 26 Powder Not Not Not Not Applicable Not Applicable Applicable Applicable Applicable TEST DURATION (HR) SOURCE ENDPOINT SPECIES VALUE LC50 96 Fish 409.46913mg/L 3 hexamine EC50 48 Crustacea 4 36000mg/L EC50 96 Algae or other aquatic plants 2510.818mg/L 3 ENDPOINT TEST DURATION (HR) SPECIES VALUE SOURCE LC50 96 Fish 9.214mg/L 3 EC50 48 2 >10mg/L Crustacea titanium dioxide EC50 72 Algae or other aquatic plants 5.83mg/L 4 EC20 72 Algae or other aquatic plants 1.81mg/L 4 NOEC 336 Fish 0.089mg/L 4 ENDPOINT TEST DURATION (HR) SPECIES VALUE SOURCE 0.00148mg/L 2 LC50 96 Fish 0.00024mg/L 4 EC50 48 Crustacea silver 0.001628837mg/L EC50 96 Algae or other aquatic plants 4 BCF 336 4 Crustacea 0.02mg/L NOEC 480 Crustacea 0.00031mg/L 2

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Harmful to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

DO NOT discharge into sewer or waterways

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
hexamine	HIGH	HIGH
titanium dioxide	HIGH	HIGH

Bioaccumulative potential

Ingredient	Bioaccumulation
hexamine	LOW (LogKOW = -4.1536)
titanium dioxide	LOW (BCF = 10)

Mobility in soil

Ingredient	Mobility
hexamine	LOW (KOC = 54.7)
titanium dioxide	LOW (KOC = 23.74)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

NLP

Product / Packaging	 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.
disposal	In all cases disposal to sever may be subject to local laws and regulations and these should be considered first.
	Where in doubt contact the responsible authority.

SECTION 14 TRANSPORT INFORMATION

Labels Required Marine Pollutant NO HAZCHEM Not Applicable Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable SECTION 15 REGULATORY INFORMATION Safety, health and environmental regulations / legislation specific for the substance or mixture HEXAMINE(100-97-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS Australia Hazardous Substances Information System - Consolidated Lists Australia Inventory of Chemical Substances (AICS) TITANIUM DIOXIDE(13463-67-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS Australia Exposure Standards International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Australia Inventory of Chemical Substances (AICS) Monographs SILVER(7440-22-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS Australia Exposure Standards Australia Inventory of Chemical Substances (AICS) Australia Hazardous Substances Information System - Consolidated Lists National Inventory Status Y Australia - AICS Canada - DSL Y Canada - NDSI N (hexamine: silver) China - IECSC Υ Europe - EINEC / ELINCS / Υ

Japan - ENCS	N (silver)
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PICCS	Υ
USA - TSCA	Υ
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

• .	
Name	CAS No
titanium dioxide	13463-67-7, 1317-70-0, 1317-80-2, 12188-41-9, 1309-63-3, 100292-32-8, 101239-53-6, 116788-85-3, 12000-59-8, 12701-76-7, 12767-65-6, 12789-63-8, 1344-29-2, 185323-71-1, 185828-91-5, 188357-76-8, 188357-79-1, 195740-11-5, 221548-98-7, 224963-00-2, 246178-32-5, 252962-41-7, 37230-92-5, 37230-94-7, 37230-95-8, 37230-96-9, 39320-58-6, 39360-64-0, 39379-02-7, 416845-43-7, 494848-07-6, 494848-23-6, 494851-77-3, 494851-98-8, 55068-84-3, 55068-85-4, 552316-51-5, 62338-64-1, 767341-00-4, 97929-50-5, 98084-96-9

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

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

Definitions and abbreviations

- PC-TWA: Permissible Concentration-Time Weighted Average
- PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

- ACGIH: American Conference of Governmental Industrial Hygienists
- STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。 IDLH: Immediately Dangerous to Life or Health Concentrations

- 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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