

Safety Data Sheet

Section 1: Identification of the material and the Supplier

Product identifier	Aquarius XH
Product use	Manufacture of dental prosthesis. Dental alloy.
Distributor information	
Company identification	Ivoclar Vivadent (NZ) Ltd
Address	12 Omega Street, Rosedale, Auckland, New Zealand
Telephone Number	0508 486 252
Emergencies within New Zealand	0800 764 766 (National Poison Control Centre)

Section 2: Hazards Identification

Product is classified as hazardous according to the HSNO (Minimum Degrees of Hazard) Regulations 2001

NZ Group Standard & EPA Approval Code Dental Products (Oxidising [5.1.1])
HSR002557



Oxidizing



Irritant

Hazard Classification	Hazard Code	Hazard Statement
5.1.1C	H272	May intensify fire; oxidizer
6.1D (Oral)	H302	Harmful if swallowed

Prevention Code	Prevention Statement
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220	Keep/Store away from clothing/combustible materials.
P221	Take any precaution to avoid mixing with combustibles.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response Code	Response Statement
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.

Storage Code	Storage Statement
-	No storage statements.

Disposal Code	Disposal Statement
P501	Dispose of according to local regulations.

Section 3: Composition/Information on Ingredients

Chemical characterization	Mixtures.
Description	Mixture of substances listed below with non-hazardous additions.

Dangerous components:

CAS	EINECS	Name	Hazard	Concentration
7440-06-4	231-116-1	platinum	O R8 Ox. Sol. 2, H272	3-<10%
7440-05-3	231-115-6	palladium	O R8 Self-heat. 2. H252; Ox. Sol. 2, H272	3-<10%

CAS: 7440-28-0 EINECS: 231-138-1	thallium	T+ R26/28 R33-53 Acute Tox. 2, H300; Acute Tox. 2, H330; STOT RE 2, H373; Aquatic Chronic 4, H413	0.1-<0.3%
Additional information		For the wording of the listed risk phrases refer to section 16.	

Section 4: First Aid Measures

Description of first aid measures:

After inhalation	Grinding dust: Supply fresh air; consult doctor in case of complaints.
After skin contact	After contact with the molten product, cool rapidly with cold water.
After eye contact	Grinding dust: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. Mechanical effects only.
After swallowing	Seek medical treatment.
Information for doctor:	
Most important symptoms and effects, both acute and delayed	No further relevant information available.
Indication of any immediate medical attention and special treatment needed	No further relevant information available.

Section 5: Fire Fighting Measures

Extinguishing media:

Suitable extinguishing agents	The product is not flammable.
Special hazards arising from the substance or mixture	No further relevant information available.
Advice for firefighters:	
Protective equipment:	Do not inhale explosion gases or combustion gases.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Wear protective equipment. Keep unprotected persons away.
Environmental precautions	No special measures required.
Methods and material for containment and cleaning up:	Pick up mechanically.
Reference to other sections	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

Section 7: Handling and Storage

Handling:

Precautions for safe handling	Extractors are required on all machines used for thermal processing or splinter removal processes. Only adequately trained personnel should handle this product. For use in dentistry only.
Information about fire - and explosion protection	Keep ignition sources away - Do not smoke.
Conditions for safe storage, including any incompatibilities:	
Storage:	
Requirements to be met by storerooms and receptacles	Store only in the original receptacle.

Information about storage in one common storage facility	Not required.
Further information about storage conditions	None.
Specific end use(s)	No further relevant information available.

Section 8: Exposure Controls/Personal Protection

Additional information about design of technical facilities	No further data; see item 7.
Control parameters:	
Ingredients with limit values that require monitoring at the workplace	7440-06-4 platinum WEL () Long-term value: 5 mg/m ³
Additional information	The lists valid during the making were used as basis.
Exposure controls:	
Personal protective equipment:	
General protective and hygienic measures	Wash hands before breaks and at the end of work. Usual hygienic measures for dental practice.
Respiratory protection	Use respiratory protective device against the effects of fumes/dust/aerosol.
Protection of hands	Protective gloves should always be worn during mechanical and thermal processing. After use of gloves apply skin-cleaning agents and skin cosmetics.
Material of gloves:	
Mechanical processing	Leather gloves. Strong material gloves.
Thermal processing	Heat protection gloves.
Penetration time of glove material	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection	Always wear safety goggles during mechanical processing (grinding, sawing/cutting, drilling, milling).

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties:	
General Information:	
Appearance:	
Form	Solid
Colour	Yellow
Odour	Odourless
Odour threshold	Not determined
pH-value	Not applicable
Change in condition:	
Melting point/Melting range	1050–1185 °C
Boiling point/Boiling range	Undetermined
Flash point	Not applicable
Flammability (solid, gaseous)	Contact with combustible material may cause fire
Self-igniting	Product is not self-igniting
Danger of explosion	Not determined
Explosion limits:	

Lower	Not determined
Upper	Not determined
Vapour pressure	Not applicable
Density at 20 °C	17.9 g/cm ³
Relative density	Not determined
Vapour density	Not applicable
Evaporation rate	Not applicable
Solubility in/Miscibility with water	Insoluble
Partition coefficient (n-octanol/water)	Not determined
Viscosity:	
Dynamic	Not applicable
Kinematic	Not applicable
Solvent content:	
Organic solvents	0.0%
Solids content	100.0%
Other information	No further relevant information available

Section 10: Stability and Reactivity

Reactivity	No further relevant information available.
Chemical stability	Stable under normal handling and storage conditions.
Thermal decomposition/ conditions to be avoided	No decomposition if used according to specifications.
Possibility of hazardous reactions	No dangerous reactions known.
Conditions to avoid	No further relevant information available.
Incompatible materials	No further relevant information available.
Hazardous decomposition products	None under normal conditions of storage and use.

Section 11: Toxicological Information

Information on toxicological effects:	
Acute toxicity:	
Primary irritant effect:	
On the skin	No irritant effect.
On the eye	No irritating effect.
Sensitization	No sensitizing effects known.
Additional toxicological information:	Fumes or dusts generated from cutting or grinding operations may cause respiratory irritation.

Section 12: Ecological Information

Toxicity	
Aquatic toxicity	No further relevant information available.
Persistence and degradability	No further relevant information available.
Behaviour in environmental systems:	
Bio accumulative potential	No further relevant information available.
Mobility in soil	No further relevant information available.

Additional ecological information:

General notes	Generally not hazardous for water.
Results of PBT and vPvB assessment:	
PBT	Not applicable.
vPvB	Not applicable.
Other adverse effects	No further relevant information available.

Section 13: Disposal Considerations

Waste treatment methods:

Recommendation	Must not be disposed together with household garbage. Do not allow product to reach sewage system. Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.
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European waste catalogue

20 01 40 metals

Uncleaned packaging:

Recommendation	Disposal must be made according to official regulations.
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Section 14: Transport Information

This product is not a Dangerous Good for Road and Rail transport in New Zealand according to NZS 5433 Safe Transport of Dangerous Goods.

Section 15: Regulatory Information

NZ Group Standard & EPA Approval Code	Dental Products (Oxidising [5.1.1]) HSR002557
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HSNO Controls:

Trigger quantities for this substance:

	Trigger Quantity
Approved Handler	1,000 kg
Location Certificate	100 L (liquid) / kg (solid)
Tracking Trigger Quantities	Not applicable
Signage Trigger Quantities	1,000 L (liquid) / kg (solid)
Emergency Response Plan Trigger Quantities	1,000 L (liquid) / kg (solid)

Section 16: Other Information

Relevant phrases	H252	Self-heating in large quantities; may catch fire.
	H272	May intensify fire; oxidiser.
	H300	Fatal if swallowed.
	H330	Fatal if inhaled.
	H373	May cause damage to organs through prolonged or repeated exposure.
	H413	May cause long lasting harmful effects to aquatic life.
	R26/28	Very toxic by inhalation and if swallowed.
	R33	Danger of cumulative effects.
	R53	May cause long-term adverse effects in the aquatic environment.
	R8	Contact with combustible material may cause fire.

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