

Safety Data Sheet

Section 1: Identification of the material and the Supplier

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| Product identifier | Aquarius Hard |
| 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 (Subsidiary)
HSR002558



Irritant

| Hazard Classification | Hazard Code | Hazard Statement |
|-----------------------|---|----------------------|
| 6.1D (Oral) | H302 | Harmful if swallowed |
| 6.1D (Inhalation) | H332 | Harmful if inhaled |
| Prevention Code | Prevention Statement | |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. | |
| P264 | Wash hands thoroughly after handling. | |
| P270 | Do not eat, drink or smoke when using this product. | |
| P271 | Use only outdoors or in a well-ventilated area. | |
| Response Code | Response Statement | |
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. | |
| P304 + P340 | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. | |
| P312 | 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:

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

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|-------------------------------------|----------|--|---------|
| 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 | 0.3-<1% |
| Additional information | | For the wording of the listed risk phrases refer to section 16. | |

Section 4: First Aid Measures

Description of first aid measures:

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| 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:

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| 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

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| 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:

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| 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. |

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| 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

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| 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

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| 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 | 1050–1145°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: | |

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| Lower | Not determined |
| Upper | Not determined |
| Vapour pressure | Not applicable |
| Density at 20°C | 18.5 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: | |
| Solids content | 100% |
| Other information | No further relevant information available |

Section 10: Stability and Reactivity

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| 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

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| 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

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| 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: | |

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| 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.

European waste catalogue

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| 20 01 40 | metals |
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Uncleaned packaging:

Recommendation Disposal must be made according to official regulations.

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 (Subsidiary)
HSR002558

HSNO Controls:

Trigger quantities for this substance:

| | Trigger Quantity |
|--|--------------------------------|
| Approved Handler | Not applicable |
| Location Certificate | Not applicable |
| Tracking Trigger Quantities | Not applicable |
| Signage Trigger Quantities | 10,000 L (liquid) / kg (solid) |
| Emergency Response Plan Trigger Quantities | 1,000 L (liquid) / kg (solid) |

Section 16: Other Information

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| 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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