

Safety Data Sheet

Section 1: Identification of the material and the Supplier

Product identifier	Harmony Medium
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 Additives, Process Chemicals & Raw Materials (Toxic [6.1])
HSR002508



Toxic

Irritant

Chronic

Ecotoxic

Hazard Classification	Hazard Code	Hazard Statement
6.1C (Oral)	H301	Toxic if swallowed
6.1C (Inhalation, dust)	H331	Toxic if inhaled
6.5B	H317	May cause an allergic skin reaction
6.6A	H340	May cause genetic defects
6.9B	H373	May cause damage to organs through prolonged or repeated exposure
9.1A	H400/H410m	Very toxic to aquatic life/Very toxic to aquatic life with long lasting effects
9.3A	H431	Very toxic to terrestrial vertebrates

Prevention Code	Prevention Statement
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
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.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.

Response Code	Response Statement
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P311	Call a POISON CENTER or doctor/physician.
P314	Get medical advice/attention if you feel unwell.

P321	Specific treatment see Section 4. First Aid Measures.
P330	Rinse mouth.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
Storage Code	Storage Statement
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
Disposal Code	Disposal Statement
P501	Dispose of according to local regulations.

Section 3: Composition/Information on Ingredients

Chemical characterization Mixtures.

Description: Dental alloy.

Dangerous components:

CAS: 7440-22-4	silver	10-<25%
EINECS: 231-131-3	substance with a Community workplace exposure limit	
CAS: 7440-50-8	copper	3-<10%
EINECS: 231-159-6	substance with a Community workplace exposure limit	
CAS: 7440-66-6	zinc powder -zinc O R8	0.3-<1%
EINECS: 231-175-3	N R50/53 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	

Additional information For the wording of the listed risk phrases refer to section 16.

Section 4: First Aid Measures

Description of first aid measures:

General information No special measures required.

After inhalation Grinding dust: Supply fresh air; consult doctor in case of complaints. In case of unconsciousness place patient stably in side position for transportation.

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 advice.

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 Not required.

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.
Information about fire - and explosion protection	No special measures required.
Conditions for safe storage, including any incompatibilities:	
Storage:	
Requirements to be met by storerooms and receptacles	No special requirements.
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	7440-22-4 silver
	WEL () Long-term value: 0.1 mg/m ³
	7440-50-8 copper
	WEL () Short-term value: 2** mg/m ³ Long-term value: 0.2* 1** mg/m ³ *fume **dusts and mists (as Cu)
Additional information	The lists valid during the making were used as basis.
Exposure controls:	
Personal protective equipment:	
General protective and hygienic measures	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	650–760 °C
Boiling point/Boiling range	Undetermined
Flash point	Not applicable
Flammability (solid, gaseous)	Not determined
Self-igniting	Product is not self-igniting
Danger of explosion	Product does not present an explosion hazard
Explosion limits:	
Lower	Not determined
Upper	Not determined
Vapour pressure	Not applicable
Density at 20 °C	15.2 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

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.
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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 Take to an approved landfill or a waste incineration plant, under conditions approved by the local authority.

European waste catalogue

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 & Additives, Process Chemicals & Raw Materials (Toxic [6.1])

EPA Approval Code HSR002508

HSNO Controls:

Trigger quantities for this substance:

	Trigger Quantity
Approved Handler	Any
Location Certificate	Not applicable
Tracking Trigger Quantities	Any

Signage Trigger Quantities	100 L (liquid) / kg (solid)
Emergency Response Plan Trigger Quantities	100 L (liquid) / kg (solid)

Section 16: Other Information

Relevant phrases	H400	Very toxic to aquatic life.
	H410	Very toxic to aquatic life with long lasting effects.
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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