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1 Identification of the substance/mixture and of the company/undertaking

- · Product identifier
- · Trade name: Y-Lite
- **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- · Application of the substance / the preparation Manufacture of dental prothesis
- · Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Ivoclar Vivadent Inc. 175 Pineview Drive, Amherst, N.Y. 14228 USA Tel. +1 800 533 6825 Fax +1 716 691 2285

Ivoclar Vivadent Inc. 1-6600 Dixie Road Mississauga, Ontario L5T 2Y2 Canada Phone: +1 905 670 8499 Fax: +1 905 670 3102

· Information department: Quality Assurance / Regulatory Affairs

Emergency telephone number:
 24 Hour Emergency Assistance:
 Emergency-Call USA - Infotrac: 1-800-535-5053
 Emergency-Call Canada - Canutec: 1-613-996-6666

General MSDS Assistance: US: 1-800-533-6825 Canada: 1-800-263-8182

2 Hazards identification

· Classification of the substance or mixture

Ox. Sol. 2 H272 May intensify fire; oxidizer.

• Classification according to Directive 67/548/EEC or Directive 1999/45/EC Oxidizing

Contact with combustible material may cause fire.

• Information concerning particular hazards for human and environment: Avoid breathing of grinding dust and vapours. Melted material may cause burns.

· Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· Label elements

- · GHS label elements
- The product is classified and labelled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Danger

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- Hazard statements
 May intensify fire; oxidizer.

 Precautionary statements
 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 Take any precaution to avoid mixing with combustibles.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Keep/Store away from clothing/combustible materials.
 In case of fire: Use for extinction: CO2, powder or water spray.
 Dispose of contents/container in accordance with local/regional/national/international regulations.
 Additional information:
 Alloys do not require a label, providing they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on the market.
 Classification system:
 - · NFPA ratings (scale 0 4)



Health = 0Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH 0	Health = 0
FIRE 0	Fire = 0
REACTIVITY 0	Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Dental alloy

· Dangerous components:		
7440-05-3	palladium	10-<25%
7440-22-4	silver	1-≤2.5%
7440-74-6	indium	<i>1-≤</i> 2.5%
7440-31-5	tin	1-≤2.5%

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.

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- · 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.

5 Firefighting 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.

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.

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 protection against explosions and fires: 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.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

7440-22-4 silver

PEL() 0.01 mg/m³ metal and soluble compounds (as Ag)

- REL () 0.01 mg/m³
- $TLV() 0.1 mg/m^3$
 - metal: dust and fume

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7440-74-6 indium	(Contd. of page
$REL() 0.1 mg/m^3$	L.
and compounds, as I	in
$TLV() 0.1 \ mg/m^3$	
7440-31-5 tin	
PEL () $2 mg/m^3$	
metal	
REL () $2 mg/m^3$	
TLV() 2 mg/m ³	
metal	
Additional information: The	e lists that were valid during the creation were used as basis.
Exposure controls	
Personal protective equipme	ent:
	ienic measures: Usual hygienic measures for dental practice.
	respiratory protective device against the effects of fumes/dust/aerosol.
Protection of hands:	
Protective gloves should alw	vays be worn during mechanical and thermal processing.
0 00 110	n-cleaning agents and skin cosmetics.
Material of gloves	
Mechanical processing:	
Leather gloves	
Strong gloves	
Thermal processing:	
Heat protection gloves	
Penetration time of glove m	
observed.	he has to be found out by the manufacturer of the protective gloves and has to b
<i>Eye protection:</i>	
	during mechanical processing (grinding, sawing /cutting, drilling, milling).
Physical and chemical	properties
Information on basic physic	cal and chemical properties
General Information	
Appearance:	
Form:	Solid
Color:	Yellow
Odor:	Odorless
Odour threshold:	Not determined.
Oubur micsnota.	

• Change in condition Melting point/Melting range: Boiling point/Boiling range:	1150–1250 °C (2102–2282 °F) Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	

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· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density at 20 °C (68 °F):	16.1 g/cm ³ (134.355 lbs/gal)	
Relative density	Not determined.	
Vapour density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Insoluble.	
Partition coefficient (n-octanol/wa	ter): Not determined.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
Solvent content:		
Solids content:	100 %	
• Other information	No further relevant information available.	

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.

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.

· Carcinogenic categories

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

· Toxicity

• Aquatic toxicity: No further relevant information available.

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· Persistence and degradability No further relevant information available.

· Behavior in environmental systems:

- *Bioaccumulative 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.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

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

· Uncleaned packagings:

• Recommendation: Disposal must be made according to official regulations.

14 Transport information · UN-Number NA3077 $\cdot DOT$ · ADR, ADN, IMDG, IATA Void · UN proper shipping name · ADR, ADN, IMDG, IATA Void · Transport hazard class(es) $\cdot DOT$ · Class 9 Miscellaneous dangerous substances and articles. · Label 9 · ADR, ADN, IMDG, IATA · Class Void · Packing group $\cdot DOT$ Ш · ADR, IMDG, IATA Void · Environmental hazards: · Marine pollutant: No · Special precautions for user Not applicable. · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · UN ''Model Regulation'':

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15 Regulatory information

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

- · Sara
- · Section 355 (extremely hazardous substances):
- None of the ingredients is listed.
- · Section 313 (Specific toxic chemical listings):
- 7440-22-4 silver
- 7440-50-8 copper
- · TSCA (Toxic Substances Control Act):
- 7440-57-5 Gold
- 7440-22-4 silver
- 7440-50-8 copper 7440-06-4 platinum
- 7440-74-6 indium 7439-88-5 iridium
- · Proposition 65
- Chemicals known to cause cancer:
- None of the ingredients is listed.
- · Chemicals known to cause reproductive toxicity for females:
- None of the ingredients is listed.
- · Chemicals known to cause reproductive toxicity for males:
- None of the ingredients is listed.
- · Chemicals known to cause developmental toxicity:
- None of the ingredients is listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency)
- 7440-22-4 silver
- 7440-50-8 copper
- · TLV (Threshold Limit Value established by ACGIH)
- None of the ingredients is listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health)
- None of the ingredients is listed.
- · OSHA-Ca (Occupational Safety & Health Administration)
- None of the ingredients is listed.
- · GHS label elements
- The product is classified and labelled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Danger

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Hazard statements
May intensify fire; oxidizer.

Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Take any precaution to avoid mixing with combustibles.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep/Store away from clothing/combustible materials.
In case of fire: Use for extinction: CO2, powder or water spray.
Dispose of contents/container in accordance with local/regional/national/international regulations.
National regulations:

• Other regulations, limitations and prohibitive regulations The product is a medical device according to the EC-directive 93/42/EEC. This product is classified as a medical device under US and Canadian regulations and has been reviewed by the US Food and Drug Administration and Health Canada.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transport Association
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)

USA