

Printing date 06/23/2015 Version number 5 Reviewed on 05/21/2015

## 1 Identification

· 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 mixture Manufacture of dental prothesis
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

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- · 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 SDS Assistance: US: 1-800-533-6825 Canada: 1-800-263-8182

## 2 Hazard(s) identification

· Classification of the substance or mixture

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

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS03

- · Signal word Danger
- · Hazard statements

May intensify fire; oxidizer.

· Precautionary statements

Keep away from heat.

Take any precaution to avoid mixing with combustibles.

Wear protective gloves / eye protection / face protection.

Keep/Store away from clothing/combustible materials.

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*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 = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



 $0 \quad Health = 0$ Fire = 0REACTIVITY 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-<3%
7440-74-6	indium	1-<3%
7440-31-5	tin	1-<3%

# 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 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.

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## 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.

## 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.
- $\cdot$  *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

EL Short-term value: 0.03 mg/m³ Long-term value: 0.01 mg/m³

as Ag

EV Long-term value: 0.1\* 0.01\*\* mg/m³

\*metal; \*\*water-soluble compdounds (as silver)

### 7440-74-6 indium

EL Long-term value: 0.1 mg/m³

as In; ACGIH 2B

EV Long-term value: 0.1 mg/m<sup>3</sup>

as indium

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### 7440-31-5 tin

EL Long-term value: 2 mg/m³

metal

EV Long-term value: 2\* 0.1\*\* mg/m<sup>3</sup>

\*metal, oxide, inorg. compds.; \*\*org. compds.: Skin

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Usual hygienic measures for dental practice.
- · Breathing equipment: 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 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).

# 9 Physical and chemical properties

· Information on basic physical and chemical properties				
· General Information	• •			
· Appearance:				
Form:	Solid			
Color:	Yellow			
· Odor:	Odorless			
· Odour threshold:	Not determined.			
· pH-value:	Not applicable.			
· Change in condition				
Melting point/Melting range:	1150−1250 °C			
Boiling point/Boiling range:	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.			
· Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			
· Vapor pressure:	Not applicable.			
· Density at 20 °C:	16.1 g/cm³			
Relative density	Not determined.			

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· Vapour density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Insoluble.	
· Partition coefficient (n-octan	ol/water): 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.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

# 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 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

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- · 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.

UN-Number	
DOT	NA3077
TDG, ADN, IMDG, IATA	Void
UN proper shipping name	
TDG, ADN, IMDG, IATA	Void
Transport hazard class(es)	
DOT	
Class	9 Miscellaneous dangerous substances and articles
Label	9
TDG, ADN, IMDG, IATA	
Class	Void
Packing group	
DOT	III
TDG, 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.

# 15 Regulatory information

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

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· TSCA (To	· TSCA (Toxic Substances Control Act):		
7440-57-5	Gold		
7440-22-4			
7440-50-8			
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	D		
7440-50-8	copper	D		
· 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.

## · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS03

## · Signal word Danger

#### · Hazard statements

May intensify fire; oxidizer.

### · Precautionary statements

Keep away from heat.

Take any precaution to avoid mixing with combustibles.

Wear protective gloves / 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 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.

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· 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.

- · Date of preparation / last revision 06/23/2015 / 4
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

 $DOT: \ US \ Department \ of \ Transportation$ 

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) Ox. Sol. 2: Oxidising Solids, Hazard Category 2

\* Data compared to the previous version altered.

CA