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

#### · Product identifier

### • Trade name: Academy Gold XH

• **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 The product is not classified according to the Globally Harmonized System (GHS).*
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- $\cdot$  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 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · 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.

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- · Classification system:
- · NFPA ratings (scale 0 4)

000

Health = 0Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)

- · 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:

Dungerous compenents		
7440-22-4	silver	10-<25%
7440-50-8	copper	10-10%
7440-06-4	platinum	1-<10%
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.
- · 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.

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· 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 Ensure good ventilation/exhaustion at the workplace.
- 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

7440-22-4 silver		
PEL()	0.01 mg/m <sup>3</sup>	
	metal and soluble compounds (as Ag)	
REL ()	$0.01 \ mg/m^3$	
TLV()	$0.1 \ mg/m^3$	
	metal: dust and fume	
7440-5	0-8 copper	
PEL()	$1*0.1**mg/m^3$	
	as Cu *dusts and mists **fume	
REL()	$1 * 0.1 * mg/m^3$	
	as Cu *dusts and mists **fume	
TLV()	$1 * 0.2 * mg/m^3$	
	*dusts and mists; **fume; as Cu	
7440-0	6-4 platinum	
PEL ()	$0.002 mg/m^3$	
	soluble salts, as Pt	
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REL ()	$1*0.002**mg/m^3$
	*Metal **soluble salts, as Pt
TLV()	$1*0.002**mg/m^3$
	*metal **soluble salts, as Pt
7440-3	1-5 tin
PEL ()	$2 mg/m^3$
	metal
REL ()	$2 mg/m^3$
TLV()	$2 mg/m^3$
U.	metal
Additio	nal information: The lists that were valid during the creation were used as basis.
Ernosu	re controls
	re controls al protective equipment:
Person	al protective equipment:
Person Genera	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice.
Persona Genera Breathi	al protective equipment: l protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol.
Persona Genera Breathi Protect	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice.
Persona Genera Breatha Protect Protect	al protective equipment: l protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol. ion of hands:
Persona Genera Breatha Protect Protect After us	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol. ion of hands: ive gloves should always be worn during mechanical and thermal processing.
Persona Genera Breatha Protect Protect After us Materia	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol. ion of hands: ive gloves should always be worn during mechanical and thermal processing. se of gloves apply skin-cleaning agents and skin cosmetics.
Persona Genera Breatha Protect Protect After us Materia Mechan	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol. ion of hands: ive gloves should always be worn during mechanical and thermal processing. se of gloves apply skin-cleaning agents and skin cosmetics. al of gloves nical processing:
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Persona Genera Breath Protect Protect After us Materia Mechar Leather Strong	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol. ion of hands: ive gloves should always be worn during mechanical and thermal processing. se of gloves apply skin-cleaning agents and skin cosmetics. al of gloves nical processing: • gloves
Persona Genera Breathi Protect Protect After us Materia Mechan Leather Strong Therma Heat pr	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol. ion of hands: ive gloves should always be worn during mechanical and thermal processing. se of gloves apply skin-cleaning agents and skin cosmetics. al of gloves nical processing: • gloves gloves el processing: rotection gloves
Persona Genera Breathi Protect Protect After us Materia Mechan Leather Strong Therma Heat pr	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol. ion of hands: ive gloves should always be worn during mechanical and thermal processing. see of gloves apply skin-cleaning agents and skin cosmetics. al of gloves nical processing: • gloves gloves sel processing:
Persona Genera Breathi Protect Protect After us Materia Mechar Leather Strong Therma Heat pr Penetra The exa	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol. ion of hands: ive gloves should always be worn during mechanical and thermal processing. se of gloves apply skin-cleaning agents and skin cosmetics. al of gloves mical processing: gloves gloves gloves to processing: rotection gloves tition time of glove material act break through time has to be found out by the manufacturer of the protective gloves and has to be
Persona Genera Breathi Protect Protect After us Materia Mechar Leather Strong Therma Heat pr Penetro The exa observe	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol. ion of hands: ive gloves should always be worn during mechanical and thermal processing. se of gloves apply skin-cleaning agents and skin cosmetics. al of gloves mical processing: gloves gloves gloves ive processing: rotection gloves tion time of glove material text break through time has to be found out by the manufacturer of the protective gloves and has to be red.
Persona General Breath Protect Protect After us Materia Mechar Leather Strong Therma Heat pr Penetra The exa observe Eye pro	al protective equipment: I protective and hygienic measures: Usual hygienic measures for dental practice. ing equipment: Use respiratory protective device against the effects of fumes/dust/aerosol. ion of hands: ive gloves should always be worn during mechanical and thermal processing. se of gloves apply skin-cleaning agents and skin cosmetics. al of gloves mical processing: gloves gloves gloves to processing: rotection gloves tition time of glove material act break through time has to be found out by the manufacturer of the protective gloves and has to be

General Information Appearance:		
Form:	Solid	
Color:	Yellow	
Odor:	Odorless	
Odour threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	860 – 925 °C (1580 – 1697 °F)	
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.	

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Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
<i>Density at 20 °C (68 °F):</i>	15.6 g/cm <sup>3</sup> (130.182 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	t <b>ter):</b> 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:

- $\cdot$  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**

· 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 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · 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.

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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.

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 Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)