

**SECTION I – PRODUCT AND COMPANY IDENTIFICATION**

Company Name	Emergency telephone number
<b>American Orthodontics</b>	<b>(920) 457-5051</b>
<b>1714 Cambridge Ave</b>	Telephone for information
<b>Sheboygan Wisconsin 53081</b>	<b>(920) 457-5051</b>

Product Identification:

Product Name	Beta Titanium Wires
Common Name	Beta Titanium Alloy
Associated Catalog Numbers	Various

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Titanium (Ti)	7440-32-6	N/E	N/E
	Molybdenum (Mo)	7439-98-7	15.0	10.0
	Zirconium (Zr)	7440-67-7	5.0	5.0
	Tin (Sn)	7440-31-5	2.0	2.0

N/E = None Established

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	>2000°C
Specific Gravity	5.06
Solubility in Water	Insoluble
Vapor Pressure	0 at 100°C
Appearance	Silver-gray metal
Odor	Odorless

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	None
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	None known
Chronic Hazards	None known
Signs & Symptoms Of Overexposure	None known

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	N/A	N/A
Skin Contact	N/A	N/A
Inhalation	N/A	N/A
Ingestion	N/A	N/A

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Mechanical exhaust
Respiratory Protection	N/A
Protective Gloves	N/A
Eye Protection	N/A
Work / Hygienic Practices	Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Clean up
Waste Disposal Method	Dispose of in accordance with local, state and federal regulations
Handling & Storage Precautions	None

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<b>American Orthodontics</b>	<b>(920) 457-5051</b>
<b>1714 Cambridge Ave</b>	Telephone for information
<b>Sheboygan Wisconsin 53081</b>	<b>(920) 457-5051</b>

## Product Identification:

Product Name	Ceramic Brackets
Common Name	Ceramic Brackets
Associated Catalog Numbers	Various

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Aluminum Oxide	1344-28-1	N/E	10 mg/m <sup>3</sup>
N/E = None Established				

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	N/A °C
Specific Gravity	ca 2.9
Solubility in Water	Insoluble
Vapor Pressure	N/A
Appearance	White, fluffy powder (material in powder form)
Odor	Odorless

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	None
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	None known
Chronic Hazards	None known
Signs & Symptoms Of Overexposure	None known

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	N/A	N/A
Skin Contact	N/A	N/A
Inhalation	N/A	N/A
Ingestion	N/A	N/A

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Mechanical exhaust
Respiratory Protection	N/A
Protective Gloves	N/A
Eye Protection	N/A
Work / Hygienic Practices	Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Clean up
Waste Disposal Method	Dispose of in accordance with local, state and federal regulations
Handling & Storage Precautions	None

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# MATERIAL SAFETY DATA SHEET

## SECTION 1. Product and Company Identification

**PRODUCT NAME:** American Orthodontics Eagle Bond MV Light-Cured Orthodontic Adhesive Syringe

**COMMON OR CHEMICAL NAME:** Light-Cured Orthodontic Adhesive

**MANUFACTURED BY:**

American Orthodontics  
1714 Cambridge Ave  
Sheboygan WI 53081  
USA

**EMERGENCY TELEPHONE:**

(800) 558-7687 / (920) 457-5051

**GENERAL INFORMATION:**

(920) 457-5051

## SECTION 2. Composition/Information on Ingredients

**Product Contents:** 4g Light-Cured Orthodontic Adhesive Syringe

**Hazardous Ingredients:** None listed.

## SECTION 3. Hazards Identification

For potential health hazards: SEE Section 11 below.

No significant hazards to man or the environment are reasonably foreseen.

## SECTION 4. First Aid Measures

**Inhalation:** No harm anticipated from material in quantities as packaged.

**Skin Contact:** Wash with soap and water.

**Eye Contact:** Flush with copious amounts of water.

**Ingestion:** Induce vomiting if large amount of material is swallowed.

## SECTION 5. Fire-Fighting Measures

**Suitable Extinguishing Media:** Water contact acceptable.

**Extinguishing Media which should not be used:** None.

**Special exposure hazards from combustion products:** None in quantities as packaged.

**Special protective equipment for fire-fighters:** None.

## SECTION 6. Accidental Release Measures

**Personal Precautions:** Avoid contact of skin or eyes. Wash hands with soap and water if contact occurs.

**Environmental Precautions:** Dispose in accordance with all federal, state, and local regulations.

**Methods for Cleaning Up:** Wipe up with soap, water, and paper towels.

## SECTION 7. Handling and Storage

**Handling Precautions:** Not applicable.

**Safe Storage Conditions:** Store at temperatures not exceeding 75°F (24°C).

**Other Restrictions or Recommendations:** Avoid exposure to moisture and light.

## SECTION 8. Exposure Controls/Personal Protection

**Respiratory Protection & Ventilation:** Not required.

**Protective Clothing or Equipment:** Not required under normal handling.

**Unusual Work/Hygienic Practices:** Avoid prolonged contact with skin; wash with soap and water.

## SECTION 9. Physical and Chemical Properties

**Appearance:** Light paste.

**Odor:** Slight odor.

**pH:** Not applicable.

**Boiling Point/Range:** Not applicable.

**Melting Point/Range:** Not applicable.

**Flash Point:** Not applicable.

**Auto-Ignition Temperature:** Not applicable.

**Flammability:** No.

**Explosive Limits in Air:** Not applicable

**Oxidizing Properties:** None.

**Vapor pressure (mm Hg):** Negligible at room temperatures.

**Vapor Density (Air=1):** Not applicable.

**Specific Gravity (H<sub>2</sub>O=1):** 3.0

**Solubility in Water:** Virtually insoluble.

**Reactivity in Water:** Not reactive.

**Other Data:** None.

## SECTION 10. Stability and Reactivity

**Stability:** Generally stable.

**Conditions of Instability:** Avoid exposure to elevated temperatures.

**Incompatibility with Various Substances:** Not applicable.

**Hazardous Decomposition Products:** Not applicable.

**Hazardous Polymerization:** None in quantities as packaged.

**Conditions to Avoid:** Avoid exposure to light and temperatures above 80°F.

### SECTION 11. Toxicological Information

**Potential Acute Health Effects:** Possibility of skin irritation or sensitization if not washed off promptly.

**Potential Chronic Health Effects:** Possibility of skin sensitization or irritation upon prolonged or repeated exposure.

**Signs and Symptoms of Exposure:** Skin/eye irritation.

**Medical Conditions Generally Aggravated by Exposure:** None known.

**Carcinogenic or Potential Carcinogenic Effects:** No ingredient listed as a carcinogen.

**Other Potential Health Effects:** None known.

### SECTION 12. Ecological Information

No ecological damage or impact anticipated upon exposure of material to the environment in quantities as packaged.

### SECTION 13. Disposal Considerations

**Waste Disposal:** Do not dispose into sink. Dispose of in accordance with all federal, state, and local regulations.

### SECTION 14. Transport Information

**UN Classification:** Not applicable.

**Identification:** Not applicable.

**Special Provisions for Transport:** Avoid elevated temperatures and high intensity light.

### SECTION 15. Regulatory Information

**U.S. FDA Dental Device:** Class II product

**EC Medical Device Directive:** Class IIa product

### SECTION 16. Other Information

*Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information in this MSDS was obtained from sources that we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or method of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. If the product is used as a component in another product or used in a way other than recommended by the Company, this MSDS information may not be applicable.*

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Product Identification:

Product Name	Etching Gel, Semi-Gel, or Liquid
Common Name	Etching Agent
Associated Catalog Numbers	001-903, 001-912, 001-913, 001-900, 001-910

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Phosphoric Acid	7664-38-2	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	158°C
Specific Gravity	1.69
Solubility in Water	Soluble
Vapor Pressure	ca 750mm HG at 100°C
Appearance	Gel, Semi-Gel, or Liquid
Odor	Characteristic

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	Alkaline materials, metals
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	Damage to tissue on contact
Chronic Hazards	None known
Signs & Symptoms Of Overexposure	Skin irritation

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	Irritation	Flush with copious amounts of water, contact physician
Skin Contact	Irritation	Wash with copious amounts of water
Inhalation	N/A	N/A
Ingestion	Irritation	Drink milk or baking soda, contact physician

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Mechanical exhaust
Respiratory Protection	N/A
Protective Gloves	Recommended
Eye Protection	Recommended
Work / Hygienic Practices	Avoid contact with skin or mucous membranes

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Wash with water into sewer
Waste Disposal Method	Wash with water into sewer
Handling & Storage Precautions	Routine precautions applicable to acids

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Product Identification:

Product Name	FluorSure Visible Light Curable Fluoride Releasing Sealant
Common Name	Light Cure Orthodontic Adhesive Sealant with Fluoride
Associated Catalog Numbers	001-915

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	<u>Common Name</u>	<u>CAS Number</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
	Sodium Fluoride	7681-49-4	2.5 mg/m <sup>3</sup>	2.5 mg/m <sup>3</sup>

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	N/A
Specific Gravity	2.2
Solubility in Water	Virtually insoluble
Vapor Pressure	N/A
Appearance	Tooth colored paste
Odor	Negligible

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	None
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	Possibility of irritation to eyes, mucous membranes	
Chronic Hazards	Possibility of sensitization or irritation upon prolonged or repeated exposure	
Signs & Symptoms Of Overexposure	Skin/eye irritation	

<u>Routes of Entry:</u>	<u>Symptom:</u>	<u>Emergency / First Aid Procedures:</u>
Eye Contact	Irritation	Flush with copious amounts of water, contact physician
Skin Contact	Irritation	Wash with copious amounts of water and soap
Inhalation	N/A	N/A
Ingestion	Irritation	Induce vomiting if large amount of material ingested , contact physician

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Mechanical exhaust
Respiratory Protection	N/A
Protective Gloves	Recommended
Eye Protection	Recommended
Work / Hygienic Practices	Avoid contact with skin or mucous membranes

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Wipe up with soap and water
Waste Disposal Method	Dispose of in accordance with local, state and federal regulations
Handling & Storage Precautions	Routine precautions applicable to acids

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<b>Sheboygan Wisconsin 53081</b>	<b>(920) 457-5051</b>

Product Identification:

Product Name	Bandtite Liquid
Common Name	Glass Ionomer Liquid
Associated Catalog Numbers	001-970, 001-970M, 001-971

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Polyacrylic acid	79-10-7	1 ppm	10 ppm

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	ca 105°C
Specific Gravity	ca 1.41
Solubility in Water	Soluble
Vapor Pressure	ca 720 mm HG at 100°C
Appearance	Liquid
Odor	Characteristic Odor

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	Alkaline Materials
Hazardous Decomposition Products	Carbon Monoxide (CO), Carbon Dioxide (CO <sub>2</sub> )
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	May cause irritation to eyes, mucous membranes
Chronic Hazards	None known
Signs & Symptoms Of Overexposure	Irritation to eyes, mucous membranes

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	May cause irritation	Flush immediately with copious amounts of water, contact physician.
Skin Contact	May cause irritation	Wash immediately with copious amounts of water, contact physician.
Inhalation	N/A	N/A
Ingestion	No hazard in small quantities	If large amounts ingested, take baking soda, contact physician.

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Mechanical exhaust
Respiratory Protection	N/A
Protective Gloves	May be used
Eye Protection	May be used

Work / Hygienic Practices

Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill

Wash with water into sewer

Waste Disposal Method

Wash with water into sewer

Handling & Storage Precautions

Avoid exposure to elevated temperatures

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<b>Sheboygan Wisconsin 53081</b>	<b>(920) 457-5051</b>

Product Identification:	
Product Name	IC Tip Freeze Spray
Common Name	Halogenated Hydrocarbon Freeze Spray
Associated Catalog Numbers	001-968

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	<u>Common Name</u>	<u>CAS Number</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
	1,1,1,2-tetra-fluoroethane	811-97-2	N/E	N/E

N/E = None Established

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	-26.5°C
Specific Gravity	N/A
Solubility in Water	Insoluble
Vapor Pressure	N/A
Appearance	Clear, colorless gas
Odor	Slight ethereal

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	Cans may rupture in fires. Decomposition may occur.
Special Fire Fighting Procedures	Cool cans with water spray

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	Alkali or Alkaline earth metals
Hazardous Decomposition Products	Hydrofluoric acid
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	Frostbite possible. Inhalation of high concentrations of vapor is harmful and may cause heart irregularities, unconsciousness or death. Intentional misuse can be fatal.	
Chronic Hazards	None known	
Signs & Symptoms Of Overexposure	As above	
<u>Routes of Entry:</u>	<u>Symptom:</u>	<u>Emergency / First Aid Procedures:</u>
Eye Contact	Irritation, redness	Flush with water for 15 minutes, contact physician
Skin Contact	Irritation, redness	Flush with water after excessive contact. Wash contaminated clothing before reuse. Treat for frostbite by gently warming affected area.
Inhalation	Breathing difficulties, heart irregularities	Immediately remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Ingestion	N/A	Seek medical attention as required

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Mechanical exhaust
Respiratory Protection	N/A
Protective Gloves	Recommended
Eye Protection	Recommended
Work / Hygienic Practices	Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Clean up
Waste Disposal Method	Dispose of in accordance with local, state and federal regulations
Handling & Storage Precautions	Do not expose to heat or direct sunlight. Do not puncture container.

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**American Orthodontics**  
1714 Cambridge Ave  
Sheboygan Wisconsin 53081

Emergency telephone number  
**(920) 457-5051**  
Telephone for information  
**(920) 457-5051**

Product Identification:

Product Name DSX Medic 365 Instrument Lubricant  
Common Name Embedded fluoropolymer particle lubricant  
Associated Catalog Numbers 001-6015

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Octylphenoxy poly-ethoxy ethanol	9002-93-1	N/E	N/E
	Fluoropolymer	9002-64	N/E	N/E
	Propylene glycol	57-56-6	N/E	N/E
	Sorbitan (EO glycol)-Monolaurate	9005-64-5	N/E	N/E

N/E = None Established

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point >100°C  
Specific Gravity 1.1  
Solubility in Water 90% soluble  
Vapor Pressure N/A  
Appearance White liquid  
Odor Mild odor

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media N/A  
Unusual Fire & Explosion Hazards N/A  
Special Fire Fighting Procedures N/A

**SECTION V – REACTIVITY DATA**

Reactivity Stable  
Incompatible Materials None  
Hazardous Decomposition Products None  
Hazardous Polymerization Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards Irritation possible to eyes / mucous membranes  
Chronic Hazards None known  
Signs & Symptoms Of Overexposure Irritation, redness

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	Irritation, redness	Flush with water
Skin Contact	N/A	Wipe off, flush with water
Inhalation	N/A	N/A
Ingestion	N/A	Seek medical attention as required

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation Mechanical exhaust

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Respiratory Protection	N/A
Protective Gloves	N/A
Eye Protection	Recommended
Work / Hygienic Practices	Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Clean up
Waste Disposal Method	Dispose of in accordance with local, state and federal regulations
Handling & Storage Precautions	Keep from freezing

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<b>Sheboygan Wisconsin 53081</b>	<b>(920) 457-5051</b>

Product Identification:

Product Name	Liquid Foil
Common Name	Potassium Alginate
Associated Catalog Numbers	861-010, 861-002, 861-003

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Potassium Alginate	9005-36-1	N/E	N/E

N/E = None Established

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	N/A
Specific Gravity	N/A
Solubility in Water	Soluble
Vapor Pressure	N/A
Appearance	Fine pink powder
Odor	Faint odor in bulk

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	Combustible when finely divided and air-suspended
Special Fire Fighting Procedures	None

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	None known
Chronic Hazards	None known
Signs & Symptoms Of Overexposure	N/A

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	Irritation due to foreign body	Flush with water
Skin Contact	N/A	N/A
Inhalation	Excessive inhalation may be annoying and can mechanically impede respiration	If large quantities have been inhaled, keep airway open, consult a physician
Ingestion	N/A	N/A

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Mechanical exhaust
Respiratory Protection	Recommended if dust is a nuisance
Protective Gloves	Not usually needed
Eye Protection	Recommended if heavy dust

Work / Hygienic Practices

Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill

Vacuum or sweep up. The use of water will make the material very slippery.

Waste Disposal Method

Dispose of in accordance with local, state and federal regulations

Handling & Storage Precautions

Store in a cool, dry place. Keep container closed.

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## Product Identification:

Product Name	Lite-Tite Glass Ionomer Orthodontic Resin Band Cement
Common Name	Glass Ionomer Resin Cement
Associated Catalog Numbers	001-980, 001-980M

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Silicon Dioxide	60676-86-01	10mg/m3	10mg/m3
	Fluorosilicate Glass	65997-14-4	10mg/m3	10mg/m3
	Barium Glass		10mg/m3	10mg/m3
	Bis-GMA	1565-94-2	N/E	N/E
	Carboxylic Acid		N/E	N/E
	Aluminum Oxide	1344-28-1	10mg/m3	10mg/m3
	Benzoyl Peroxide	94-36-0	5mg/m3	5mg/m3
	Photo initiators	24650-42-8	N/E	N/E

N/E = none established

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	N/A
Specific Gravity	N/A
Solubility in Water	Insoluble
Vapor Pressure	N/A
Appearance	Tinted Paste
Odor	Characteristic

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	Chemical Foam, Carbon Dioxide or Dry Chemical
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	Peroxide for base paste, Amine for catalyst paste
Hazardous Decomposition Products	Calcium oxide, Fluoride
Hazardous Polymerization	May Occur, Avoid extreme heat / exposure to light

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	May occur for special allergic or over-exposed people
Chronic Hazards	None known
Signs & Symptoms Of Overexposure	Irritation

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	Irritation	Wash with copious amounts of water, contact physician
Skin Contact	Irritation	Wash with soap and water immediately
Inhalation	N/A	N/A

Ingestion

Irritation

Consult a physician

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Local exhaust recommended
Respiratory Protection	N/A
Protective Gloves	Recommended
Eye Protection	Recommended
Work / Hygienic Practices	Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Clean up using gloves, dispose of in an approved manner
Waste Disposal Method	Dispose of in accordance with local, state, and federal regulations
Handling & Storage Precautions	Avoid contact with skin and mucous membranes. Avoid extreme heat, sunlight or visible light. Keep closed when not in use.

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**SECTION I – PRODUCT AND COMPANY IDENTIFICATION**

Company Name	Emergency telephone number
<b>American Orthodontics</b>	<b>(920) 457-5051</b>
<b>1714 Cambridge Ave</b>	Telephone for information
<b>Sheboygan Wisconsin 53081</b>	<b>(920) 457-5051</b>

Product Identification:

Product Name	Multiphase Products
Common Name	Chromium Cobalt Alloys
Associated Catalog Numbers	Multiphase Wire, Jones Jigs

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	Wt %	CAS Number	OSHA PEL	ACGIH TLV
	Cobalt, Co	20-35	7440-48-7	0.1	0.1
	Chromium, Cr	10-25	7440-47-3	1.0	0.5
	Molybdenum, Mo	7-12	7439-98-7	5.0	5.0
	Nickel, Ni	25-35	7440-02-0	1.0	1.0

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	High °C
Specific Gravity	7.5 – 8.5
Solubility in Water	Insoluble
Vapor Pressure	Nil at 100°C
Appearance	Solid metal
Odor	Odorless

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	None
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	None known in form supplied
Chronic Hazards	None known in form supplied
Signs & Symptoms Of Overexposure	N/A

<u>Routes of Entry:</u>	<u>Symptom:</u>	<u>Emergency / First Aid Procedures:</u>
Eye Contact	Unlikely in form supplied	N/A
Skin Contact	Unlikely in form supplied	N/A
Inhalation	Unlikely in form supplied	N/A
Ingestion	Unlikely in form supplied	N/A

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	General
Respiratory Protection	Required when cutting, grinding, or welding
Protective Gloves	Required when cutting, grinding, or welding
Eye Protection	Required when cutting, grinding, or welding

Work / Hygienic Practices                      Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Clean up
Waste Disposal Method	Dispose of in accordance with local, state, and federal regulations
Handling & Storage Precautions	None

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**SECTION I – PRODUCT AND COMPANY IDENTIFICATION**

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Product Identification:

Product Name	Multiphase Products
Common Name	Chromium Cobalt Alloys
Associated Catalog Numbers	Multiphase Wire, Jones Jigs

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	Wt %	CAS Number	OSHA PEL	ACGIH TLV
	Cobalt, Co	20-35	7440-48-7	0.1	0.1
	Chromium, Cr	10-25	7440-47-3	1.0	0.5
	Molybdenum, Mo	7-12	7439-98-7	5.0	5.0
	Nickel, Ni	25-35	7440-02-0	1.0	1.0

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	High °C
Specific Gravity	7.5 – 8.5
Solubility in Water	Insoluble
Vapor Pressure	Nil at 100°C
Appearance	Solid metal
Odor	Odorless

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	None
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	None known in form supplied
Chronic Hazards	None known in form supplied
Signs & Symptoms Of Overexposure	N/A

<u>Routes of Entry:</u>	<u>Symptom:</u>	<u>Emergency / First Aid Procedures:</u>
Eye Contact	Unlikely in form supplied	N/A
Skin Contact	Unlikely in form supplied	N/A
Inhalation	Unlikely in form supplied	N/A
Ingestion	Unlikely in form supplied	N/A

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	General
Respiratory Protection	Required when cutting, grinding, or welding
Protective Gloves	Required when cutting, grinding, or welding
Eye Protection	Required when cutting, grinding, or welding

Work / Hygienic Practices                      Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Clean up
Waste Disposal Method	Dispose of in accordance with local, state, and federal regulations
Handling & Storage Precautions	None

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Product Identification:

Product Name	MR Lock Band Cement
Common Name	Light Curable Orthodontic Band Cement
Associated Catalog Numbers	001-975

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
No Hazardous Ingredients				

N/E = none established

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	N/A
Specific Gravity	ca 3.0
Solubility in Water	Negligible
Vapor Pressure	N/A
Appearance	Fine white powder
Odor	Odorless

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	Water, Chemical Foam, Carbon Dioxide or Dry Chemical
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	None
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	None known
Chronic Hazards	None known
Signs & Symptoms Of Overexposure	Irritation

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	Irritation	Wash with copious amounts of water, contact physician
Skin Contact	Irritation	Wash with soap and water immediately
Inhalation	N/A	N/A
Ingestion	Irritation	Consult a physician

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Local exhaust recommended
Respiratory Protection	N/A
Protective Gloves	Recommended
Eye Protection	Recommended
Work / Hygienic Practices	Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Clean up using gloves, dispose of in an approved manner
Waste Disposal Method	Dispose of in accordance with local, state, and federal regulations
Handling & Storage Precautions	Avoid contact with skin and mucous membranes. Avoid extreme heat, sunlight or visible light. Keep closed when not in use.

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Product Identification:

Product Name	Nickel Titanium Wire, Jones Jig Spring, Jet Family Springs
Common Name	Nickel Titanium Wire Material
Associated Catalog Numbers	Various

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Nickel	7440-02-0	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	High °C
Specific Gravity	8.9
Solubility in Water	Insoluble
Vapor Pressure	N/A at 100°C
Appearance	Solid metal in wire form
Odor	None

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	None
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	May occur for special allergic or over-exposed people	
Chronic Hazards	Nickel has been reported to cause cancer of the lungs and sinuses	
Signs & Symptoms Of Overexposure	Unlikely in wire form. Irritation to affected areas, sneezing, metallic taste	

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	Mechanical irritation	Consult a physician
Skin Contact	Dermatitis in sensitive people	Wash with water, consult a physician
Inhalation	N/A	N/A
Ingestion	Not likely. Irritation in sensitive people	Consult a physician

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Mechanical exhaust
Respiratory Protection	N/A
Protective Gloves	May be used
Eye Protection	May be used
Work / Hygienic Practices	Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	N/A
Waste Disposal Method	Dispose of in accordance with local, state and federal regulations
Handling & Storage Precautions	None

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Email: [amo@americanortho.com](mailto:amo@americanortho.com) • [www.americanortho.com](http://www.americanortho.com)

## MATERIAL SAFETY DATA SHEET INFORMATION

Following is a listing of products American Orthodontics manufactures or distributes that do not contain hazardous ingredients and therefore do not require an MSDS report:

Bandtite glass ionomer powder	Urethane products: ( <b>Note: Urethane products do not contain latex</b> )
Brackets, 20/40 ceramic	Arch wire plastic sleeves
Brackets, Classic cosmetic	Jasper Jumpers
Brackets, Radiance cosmetic	Cosmetic wire coating
Brackets, Sierra / Sierra Classic cosmetic	E-Z Tie tubing
Brackets, Silkon / Silkon Plus cosmetic	Korn mandibular advancers
Brackets, Virage ceramic	Memory chain
Cheek retractors	Models, Two Tone Urethane
Cotton roll holders	Plastic chain
Eagle Bond adhesive	Plastic ligatures
Eagle Bond sealant	Plastic separators
Eagle No Drift adhesive	Plastic tie
Eagle No Drift sealant	Radio opaque plastic separators
Eagle Spectrum adhesive	Rotation wedges
Eagle Spectrum sealant	
Elastics, Latex	
Elastics, Latex-free	
Force II adhesive paste A and paste B	
Force II adhesive resin A and resin B	
Head Gear Straps, Cervical or High Pull	
Heat shield	
Impression Trays	
Instrument lubricant	
Laminated bite wafers	
MR Lock LC band cement	
MR Lock carpule gun	
No Mix:30 adhesive paste	
No Mix:30 liquid activator	
Ortho wax bites	
Orthodontic patient wax	
Spectrum light cured adhesive paste	
Spectrum light cured adhesive sealant	
Tooth positioners	
Ultem replacement heat sterilizable pad	
Unimarc archwire markers	
YC3 Shield	

For further information regarding these products, call American Orthodontics at  
(800) 558-7687 or (920) 457-5051.

**SECTION I – PRODUCT AND COMPANY IDENTIFICATION**

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<b>American Orthodontics</b>	<b>(920) 457-5051</b>
<b>1714 Cambridge Ave</b>	Telephone for information
<b>Sheboygan Wisconsin 53081</b>	<b>(920) 457-5051</b>

Product Identification:

Product Name	Plastic Bracket Primer
Common Name	Methacrylate Monomer
Associated Catalog Numbers	001-965, 001-967

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Methacrylate Monomer	80-62-6	410 mg/m <sup>3</sup>	410 mg/m <sup>3</sup>

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	101°C
Specific Gravity	0.96
Solubility in Water	1.5% at 20°C
Vapor Pressure	3.5mm at 20°C
Appearance	Clear, viscous liquid
Odor	Acrylic odor

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	CO <sub>2</sub> , Dry Chemical
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	Routine for water immiscible liquid

**SECTION V – REACTIVITY DATA**

Reactivity	Unstable
Incompatible Materials	Peroxides, high temperatures, sun light
Hazardous Decomposition Products	None
Hazardous Polymerization	May occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	Skin, mucous membrane irritation, rash
Chronic Hazards	Skin sensitization, dermatitis upon prolonged or repeated exposure
Signs & Symptoms Of Overexposure	Redness of skin, rash, headache, dizziness

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	Irritation	Flush with copious amounts of water, contact physician
Skin Contact	Irritation	Wash with copious amounts of water
Inhalation	N/A	N/A
Ingestion	Irritation	Induce vomiting, contact physician

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Local or mechanical exhaust
Respiratory Protection	N/A
Protective Gloves	Recommended
Eye Protection	Recommended

PlasticPrimer.doc

Work / Hygienic Practices

Avoid contact with skin or mucous membranes. Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill

Wipe up, avoid contact with skin

Waste Disposal Method

Dispose of according to local, state, and federal requirements

Handling &amp; Storage Precautions

Avoid exposure to light and elevated temperatures

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<b>1714 Cambridge Ave</b>	Telephone for information
<b>Sheboygan Wisconsin 53081</b>	<b>(920) 457-5051</b>

Product Identification:

Product Name	Porcelain Primer
Common Name	Porcelain Primer
Associated Catalog Numbers	001-966

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	<u>Common Name</u>	<u>CAS Number</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
	Isopropanol	67-63-0	980 mg/m <sup>3</sup>	

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	82.3°C
Specific Gravity	.79
Solubility in Water	Soluble
Vapor Pressure	33 mm HG @ 20°C
Appearance	Clear, low viscosity liquid
Odor	Characteristic

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	Dry chemical, CO <sub>2</sub> or Foam
Unusual Fire & Explosion Hazards	May cause fire or explosion if exposed to open flame or heat. Especially dangerous if atomized in air.
Special Fire Fighting Procedures	Do not use water

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	Isocyanates, strong oxidizing agents, alkali metals
Hazardous Decomposition Products	Carbon Monoxide (CO), Carbon Dioxide (CO <sub>2</sub> )
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	Irritation of respiratory tracts, headache, dizziness or nausea	
Chronic Hazards	Eye irritation and blurred vision, skin irritation, dermatitis	
Signs & Symptoms Of Overexposure	As described above	

<u>Routes of Entry:</u>	<u>Symptom:</u>	<u>Emergency / First Aid Procedures:</u>
Eye Contact	Irritation	Flush with copious amounts of water, contact physician
Skin Contact	Irritation	Wash with copious amounts of water
Inhalation	N/A	N/A
Ingestion	Irritation	Induce vomiting, contact physician

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Local or mechanical exhaust
Respiratory Protection	N/A
Protective Gloves	Recommended
Eye Protection	Recommended

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Work / Hygienic Practices

Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill

Absorb and mark container "flammable"

Waste Disposal Method

Dispose of according to local, state, and federal regulations

Handling &amp; Storage Precautions

Avoid splashing, avoid contact with skin and mucous membranes. Keep away from sparks, heat, open flame, oxidizing agents, alkalis and Isocyanates.

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Company Name  
**American Orthodontics**  
**1714 Cambridge Ave**  
**Sheboygan Wisconsin 53081**

Emergency telephone number  
**(920) 457-5051**  
Telephone for information  
**(920) 457-5051**

Product Identification:

Product Name Silver Solder, Brazing Alloys  
Common Name Soldering, Brazing Compounds  
Associated Catalog Numbers 860-003 thru 860-009, 860-000, various products brazed or soldered during manufacture

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Copper, Cu	7440-50-8	1.0	1.0
	Gold, Au	7440-57-5	N/E	N/E
	Nickel, Ni	7440-02-0	1.0	1.0
	Palladium, Pd	7440-05-3	N/E	N/E
	Silver, Ag	7440-22-4	0.01	0.1
	Tin, Sn	7440-31-5	2.0	2.0
	Zinc, Zn	7440-66-6	5.0	10.0

N/E = None Established

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point >620°C  
Specific Gravity 8.77 – 9.41  
Solubility in Water Insoluble  
Vapor Pressure Nil at 100°C  
Appearance White to light yellow metal in wire form  
Odor Odorless

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media N/A  
Unusual Fire & Explosion Hazards N/A  
Special Fire Fighting Procedures N/A

**SECTION V – REACTIVITY DATA**

Reactivity Stable  
Incompatible Materials Strong oxidizers, peroxides, acids, chlorine  
Hazardous Decomposition Products Metal / metal oxide fume  
Hazardous Polymerization Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards None known in form supplied  
Chronic Hazards None known in form supplied  
Signs & Symptoms Of Overexposure N/A

Routes of Entry:	Symptom:	Emergency / First Aid Procedures:
Eye Contact	Unlikely in form supplied	N/A
Skin Contact	Unlikely in form supplied	N/A
Inhalation	Respiratory tract irritation	Remove to fresh air, consult a physician
Ingestion	Unlikely in form supplied	N/A

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Mechanical Exhaust
Respiratory Protection	Required
Protective Gloves	May be used
Eye Protection	May be used
Work / Hygienic Practices	Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Clean up
Waste Disposal Method	Dispose of in accordance with local, state, and federal regulations
Handling & Storage Precautions	None

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<u>Routes of Entry:</u>	<u>Symptom:</u>	<u>Emergency / First Aid Procedures:</u>
Eye Contact	Unlikely in form supplied	N/A
Skin Contact	Unlikely in form supplied	N/A
Inhalation	Unlikely in form supplied	N/A
Ingestion	Unlikely in form supplied	N/A

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	General
Respiratory Protection	Required when cutting, grinding, or welding
Protective Gloves	Required when cutting, grinding, or welding
Eye Protection	Required when cutting, grinding, or welding
Work / Hygienic Practices	Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	Clean up
Waste Disposal Method	Dispose of in accordance with local, state, and federal regulations
Handling & Storage Precautions	None

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Product Identification:

Product Name	Ultra Flux Soldering Flux
Common Name	Soldering/brazing flux
Associated Catalog Numbers	860-010, 860-011

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	Common Name	CAS Number	OSHA PEL	ACGIH TLV
	Potassium Tetraborate	1332-77-0	N/E	N/E
	Boric Acid	10043-35-3	N/E	N/E
	Potassium Bifluoride	7789-29-9	2.5 mg/m3	2.5 mg/m3
	Potassium Pentaborate	11128-29-3	N/E	N/E
	Sodium Dodecyl Sulfate	151-21-3	N/E	N/E

N/E = None Established

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	N/A
Specific Gravity	1.49
Solubility in Water	Soluble
Vapor Pressure	N/A
Appearance	White paste
Odor	Odorless

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	Toxic and corrosive fluoride compounds may be released in a fire situation
Special Fire Fighting Procedures	None

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	Strong acids and alkalis
Hazardous Decomposition Products	Emits toxic and corrosive fluoride compounds.
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	Contact may cause irritation and fluoride burns. Ingestion/inhalation may cause abdominal pain, diarrhea, vomiting, excess salivation, thirst, perspiration and painful spasms of the limbs. Large amounts may be fatal.	
Chronic Hazards	Exposure to fluorides may produce mottling of tooth enamel, embrittlement and decalcification of ligaments and vertebrae resulting in spinal stiffness.	
Signs & Symptoms Of Overexposure	As above. Also nasal discharge, nosebleeds, coughing, sore throat, labored breathing. Severe exposure may cause bronchospasm and pulmonary edema.	
<u>Routes of Entry:</u>	<u>Symptom:</u>	<u>Emergency / First Aid Procedures:</u>
Eye Contact	Irritation and fluoride burns	Flush with water for at least 30 minutes, contact physician
Skin Contact	Fluoride burns	Flush with water for at least 15 minutes while removing contaminated clothing and paying

Inhalation  
Ingestion

Irritation  
Irritation

particular attention to skin under nails, contact physician.  
Remove to fresh air  
Do not induce vomiting. Give large quantities of water. Contact physician.

#### SECTION VII – SPECIAL PROTECTION INFORMATION

Ventilation	Local exhaust
Respiratory Protection	Recommended
Protective Gloves	Gloves required
Eye Protection	Goggles required
Work / Hygienic Practices	Avoid skin contact. Follow standard laboratory safety practices

#### SECTION VIII – SAFE HANDLING MEASURES

Precautions In Case Of Spill	Soak up using an absorbent
Waste Disposal Method	Dispose of in accordance with local, state and federal regulations
Handling & Storage Precautions	Wash thoroughly after handling. Keep container closed. Use with adequate ventilation.

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<b>Sheboygan Wisconsin 53081</b>	<b>(920) 457-5051</b>

Product Identification:

Product Name	Zirconium Nitride Coating
Common Name	Forever Gold I brackets
Associated Catalog Numbers	Various

**SECTION II – HAZARDOUS COMPONENTS**

Ingredients Considered Hazardous	<u>Common Name</u>	<u>CAS Number</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
	Zirconium (Zr)	7440-67-7	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
	Nitrogen (N)	7727-37-9	N/A	N/A

**SECTION III – PHYSICAL CHARACTERISTICS**

Boiling Point	High °C
Specific Gravity	7.18
Solubility in Water	Insoluble
Vapor Pressure	N/A at 100°C
Appearance	ZrN is a chemically inert substance, light gold in color, approx .0001" thick
Odor	None

**SECTION IV – FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media	N/A
Unusual Fire & Explosion Hazards	N/A
Special Fire Fighting Procedures	N/A

**SECTION V – REACTIVITY DATA**

Reactivity	Stable
Incompatible Materials	None
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur

**SECTION VI – HEALTH HAZARD DATA**

Acute Hazards	No adverse affects known in form supplied	
Chronic Hazards	No adverse affects known in form supplied	
Signs & Symptoms Of Overexposure	Unlikely in form supplied. If ground or welded, irritation to affected areas, sneezing, metallic taste	

<u>Routes of Entry:</u>	<u>Symptom:</u>	<u>Emergency / First Aid Procedures:</u>
Eye Contact	Mechanical irritation	Consult a physician
Skin Contact	None expected	Consult a physician as necessary
Inhalation	N/A	N/A
Ingestion	Not likely. Irritation in sensitive people	Consult a physician

**SECTION VII – SPECIAL PROTECTION INFORMATION**

Ventilation	Mechanical exhaust
Respiratory Protection	N/A
Protective Gloves	May be used
Eye Protection	May be used
Work / Hygienic Practices	Follow standard laboratory safety practices

**SECTION VIII – SAFE HANDLING MEASURES**

Precautions In Case Of Spill	N/A
Waste Disposal Method	Dispose of in accordance with local, state and federal regulations
Handling & Storage Precautions	None

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The information contained in the MSDS is believed to be valid and accurate. American Orthodontics, however, makes no warranty, either expressed or implied, as to the completeness of information in all possible conditions. **Reasonable safety precautions must always be observed.**