

SAFETY DATA SHEETS

This SDS packet was issued with item:

077106685

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

077081102 077106503 077106511 077106529 077106537 077106677 077122468 077122484 077122492 077175425

3610-ba2

ivoclar vivadent
 175 Pineview Drive, AMHERST NY 14228
 2785 Skymark Ave. Unit 1, Mississauga, Ontario L4W 4Y3

M S D S
 Material Safety Data Sheet
 For emergency only call INFOTRAC: 1-800-535-5053
 In Canada, call CANUTEC: 613-996-6666

Multilink Metal Primer
 Page 1

FOR PROFESSIONAL DENTAL USE ONLY

Section 1: Product Identification & Use **Primer**

Product **Multilink Metal Primer**

Product # 576827

Section 2.1: Hazardous Ingredients

| Component | % Range | CAS# | PEL* | TLV* | LD50/LC50/TDL _o |
|--------------------------|---------|-------------|-------|---------|------------------------------|
| Tert. butyl alcohol | < 70 | 75-65-0 | n.av. | n.av. | LD50 for rat is 3500 mg/kg |
| Methyl isobutyl ketone | < 25 | 108-10-1 | n.av. | n.av. | LD50 for rat is 2080 mg/kg |
| Phosphonic acid acrylate | < 6 | 223681-84-3 | n.av. | n.av. | |
| Benzoylperoxide | < 2 | 94-36-0 | | n.av. | LD50 for rat is > 7710 mg/kg |
| Ethoxylated Bis-EMA | 0-5 | 41637-38-1 | | 200 ppm | |

Section 2.2: Other Ingredients *All Exposure limits are in milligram per cubic meter of air (mg/m3)

| Component | % Range | CAS# | PEL* | TLV* | LD50/LC50/TDL _o |
|-----------|---------|------|------|------|----------------------------|
|-----------|---------|------|------|------|----------------------------|

Section 3: Physical Data

| | | | | | |
|-----------------------|----------------|--|---------|-----|---------|
| Boiling Point °C: | n. ap. | Melting Point °C: | n. ap. | pH: | n. det. |
| Vapor Pressure mm Hg: | n. ap. | Vapor Density air 1: | n. det. | | |
| Odor Threshold: | characteristic | Specific Gravity H ₂ O—1g/cm ³ : | n. ap. | | |
| Appearance / Odor: | Clear liquid | | | | |

Section 4: Fire or Explosion Data

| | | | | | |
|------------------------------------|---|------------------|-----------|----------------------|--------------------|
| Flash Point °C: | 11 | Autoignition °C: | > 400 | Solubility in water: | partially miscible |
| Flammable Limits % In Air / Upper: | 9 val.% | Lower: | 1.2 val % | | |
| Extinguisher Media: | Not required. | | | | |
| Other Fire and Explosion Hazards: | Highly flammable | | | | |
| Hazardous Combustion Products: | Avoid ignition sources such as flames or spark producing equipment. | | | | |

FOR PROFESSIONAL DENTAL USE ONLY

Section 5: Reactivity Data

Chemical Stability: No **If No...Under What Conditions:** n. ap.
Incompatibility with other Substances: Not required.
If So...Which Ones: n. ap.
Reactivity and Under What Conditions: Polymerization with heat buildup may occur.
Hazardous Polymerization: Avoid ignition sources such as flames or spark producing equipment.

Section 6: Toxicological Properties

Primary Routes of Entry: Ingestion, inhalation, eyes, skin
Symptoms of Acute Exposure: Do not breathe vapor. Signs and symptoms of excessive exposure may be narcotic effects.
Symptoms of Chronic Exposure: Prolonged or repeated skin contact may cause allergic skin reactions in some individuals.

Medical Conditions Generally Aggravated by Exposure: Excessive exposure may cause eye and respiratory irritation.

Carcinogen/Potential Carcinogen: No **NTP:** No **IARC:** No **OSHA Reg.:** No
Teratogenicity: No **Reproductive Toxicity:** No
Embryo Toxin: No **Sensitization:** Yes

Section 7: Preventative Measures

Eyes: Safety goggles **Gloves:** Solvent resistant gloves
Ventilation: Provide adequate local ventilation.
Respiratory Protection: In poorly ventilated areas, use air-purifying respiratory protection apparatus (type A).
Leak and Spill Procedure: Clean up with absorbent material. Do not allow to flow off into the drains or waters.
Waste Disposal Methods: Dispose of according to all local, state, provincial and federal regulations
Storage: Store at 2-8°C / 36-46°F.
Shipment: UN # 1120 Class 3
Other Preventative Measures: Avoid direct contact with eyes and skin.

Section 8: First Aid Measure

Inhalation: Remove victim to fresh air. If respiratory irritation is experienced, call a physician.
Ingestion: After ingestion call a physician immediately and show this safety data sheet. Do not induce vomiting. Give large amount s of water.
Eyes: Flush with plenty of water (10-15 Min.). Call a physician.
Skin: Wash thoroughly with soap and water.

Section 9: Preparation Data

Prepared by: Anderjeet Gulati (716) 691-0010 **Date:** March 15, 2004 **Ref:**

Disclaimer: The information and recommendations are taken from sources believed to be accurate, however, Ivoclar Vivadent, Inc. makes no warranty with respect to the accuracy of the information or the suitability of the recommendation and assumes no liability to any user thereof.

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

- **Product identifier**
- **Trade name:** Multilink Primer A
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Self-curing and self-etching primer
- **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
- **Manufacturer/Supplier:**
 Ivoclar Vivadent Inc.
 2785 Skymark Avenue, Unit 1, Mississauga, Ontario L4W4Y3
 CANADA
 Tel. +1 800 263 8182
 Fax +1 905 238 5711
- **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 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

| | | | |
|-----------|--|--|---------|
| 3077-12-1 | 2,2'-[(4-methylphenyl)imino]bisethanol |  H301 | 2.5-10% |
|-----------|--|--|---------|

3 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC** Not applicable.
- **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**
- **Labelling according to EU guidelines:**
 Medical devices as defined in Directive 93/42/EEC and which are invasive or used in direct physical contact with the human body, are exempted from the provisions of Dangerous Substance Directive 1999/45/EC usually if they are in the finished state and intended for the final user.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



(Contd. on page 2)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/26/2011

Version number 5

Reviewed on 08/26/2011

Trade name: **Multilink Primer A**

(Contd. of page 1)

· **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.

4 First aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Rinse with water.
Generally the product does not irritate the skin.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
- **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:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

USA

(Contd. on page 3)

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 08/26/2011

Version number 5

Reviewed on 08/26/2011

Trade name: Multilink Primer A

(Contd. of page 2)

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Only adequately trained personnel should handle this product.
For use in dentistry only.
- **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:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in a cool place.
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
- **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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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:** Safety glasses

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- **Form:** Fluid
- **Color:** Colorless
- **Odor:** Characteristic

(Contd. on page 4)

USA

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/26/2011

Version number 5

Reviewed on 08/26/2011

Trade name: Multilink Primer A

(Contd. of page 3)

| | |
|---|---|
| · Odour threshold: | Not determined. |
| · pH-value: | Not determined. |
| · Change in condition Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | Undetermined. |
| · Flash point: | Not applicable. |
| · 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 determined. |
| · Density: | Not determined. |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with Water: | Soluble. |
| · Segregation coefficient (n-octanol/water): | Not determined. |
| · Viscosity: Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · 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:**
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

USA

(Contd. on page 5)

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 08/26/2011

Version number 5

Reviewed on 08/26/2011

Trade name: Multilink Primer A

(Contd. of page 4)

12 Ecological information

- **Toxicity**
- **Acquatic 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:**
 Water hazard class 1 (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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

- | |
|--|
| <ul style="list-style-type: none"> · DOT regulations: · Hazard class: - |
| <ul style="list-style-type: none"> · Land transport ADR/RID (cross-border): · ADR/RID class: - |
| <ul style="list-style-type: none"> · Maritime transport IMDG: · IMDG Class: - · Marine pollutant: No |
| <ul style="list-style-type: none"> · Air transport ICAO-TI and IATA-DGR: · ICAO/IATA Class: - |
- **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**
- **Sara**

| |
|--|
| <ul style="list-style-type: none"> · Section 355 (extremely hazardous substances): |
|--|

| |
|------------------------------------|
| None of the ingredients is listed. |
|------------------------------------|

| |
|--|
| <ul style="list-style-type: none"> · Section 313 (Specific toxic chemical listings): |
|--|

| |
|------------------------------------|
| None of the ingredients is listed. |
|------------------------------------|

(Contd. on page 6)

USA

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 08/26/2011

Version number 5

Reviewed on 08/26/2011

Trade name: Multilink Primer A

(Contd. of page 5)

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **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)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **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.

· **Product related hazard informations:**

Medical devices as defined in Directive 93/42/EEC and which are invasive or used in direct physical contact with the human body, are exempted from the provisions of Dangerous Substance Directive 1999/45/EC usually if they are in the finished state and intended for the final user.

· **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.

USA