

Safety Data Sheet

Section 1: Identification of the material and the Supplier

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| Product identifier | Monobond Plus |
| Product use | Universal primer mediating a bond between metal, glass/oxid ceramics and resin |
| Distributor information | |
| Company identification | Ivoclar Vivadent (NZ) Ltd |
| Address | 12 Omega Street, Rosedale, Auckland, New Zealand |
| Telephone Number | 0508 486 252 |
| Emergencies within New Zealand | 0800 764 766 (National Poison Control Centre) |

Section 2: Hazards Identification

Product is classified as hazardous according to the HSNO (Minimum Degrees of Hazard) Regulations 2001

NZ Group Standard & EPA Approval Code Surface Coatings and Colourants (Flammable)
HSR002662



Flammable



Irritant

| Hazard Classification | Hazard Code | Hazard Statement |
|-----------------------|-------------|-------------------------------------|
| 3.1B | H225 | Highly flammable liquid and vapour |
| 6.3B | H316 | Causes mild skin irritation |
| 6.4A | H319 | Causes serious eye irritation |
| 6.5B | H317 | May cause an allergic skin reaction |

| Prevention Code | Prevention Statement |
|-----------------|--|
| P103 | Read label before use. |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting/equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

| Response Code | Response Statement |
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| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. |
| P321 | Specific treatment see Section 4. First Aid Measures. |
| P332 + P313 | If skin irritation occurs: Get medical advice/attention. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P363 | Wash contaminated clothing before reuse. |
| P370 + P378 | In case of fire: Use CO ₂ , powder or water spray for extinction. Fight larger fires with water spray or alcohol resistant foam. |

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| Storage Code | Storage Statement |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| Disposal Code | Disposal Statement |
| P501 | Dispose of according to Local Regulations. |

Section 3: Composition/Information on Ingredients

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| Chemical characterization | Mixtures. |
| Description | Mixture of substances listed below with non-hazardous additions. |

| Dangerous components: | | | |
|-------------------------------------|--------------------------------------|-------------------|---------|
| CAS: 64-17-5 EINECS: 200-578-6 | ethanol | F R11 | 50-100% |
| CAS: 2530-85-0 EINECS: 219-785-8 | 3-trimethoxysilylpropyl methacrylate | Xi R36/37/38 | ≤2.5% |
| CAS: 85590-00-7 | Methacrylated phosphoric acid ester | Xi R36/38; Xi R43 | ≤2.5% |

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| Additional information | For the wording of the listed risk phrases refer to section 16. |
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Section 4: First Aid Measures

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| Description of first aid measures: | |
| After inhalation | Supply fresh air; consult doctor in case of complaints. In case of unconsciousness place patient stably in side position for transportation. |
| After skin contact | Immediately rinse with water. |
| After eye contact | Rinse opened eye for several minutes under running water. Then consult a doctor. |
| After swallowing | 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. |

Section 5: Fire Fighting Measures

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| Extinguishing media: | |
| Suitable extinguishing agents | CO ₂ , 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. |
| Additional information | Cool endangered receptacles with water spray. |


Section 6: Accidental Release Measures

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| 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 | 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. |

Section 7: Handling and Storage

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| Handling: | |
| Precautions for safe handling | Only adequately trained personnel should handle this product. For use in dentistry only. |
| Information about fire and explosion protection | 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 | Protect from exposure to the light. Protect from heat and direct sunlight. Keep container tightly sealed. |
| Specific end use(s) | No further relevant information available. |

Section 8: Exposure Controls/Personal Protection

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| Additional information about design of technical facilities | No further data; see item 7. |
| Control parameters: | |
| Ingredients with limit values that require monitoring at the workplace | 64-17-5 ethanol WEL () Long-term value: 1920 mg/m ³ , 1000 ppm |
| Additional information | The lists valid during the making were used as basis. |
| Exposure controls: | |
| Personal protective equipment: | |
| General protective and hygienic measures | Usual hygienic measures for dental practice. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Keep away from foodstuffs, beverages and feed. |
| Respiratory protection | Not required. |
| Protection of hands |  <p>Protective gloves.</p> <p>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.</p> |
| 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. |
| Not suitable are gloves made of the following materials | Commercial medical gloves do not provide protection against the sensitizing effect of methacrylates. |
| Eye protection | Safety glasses. |

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties:

General Information:

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| Appearance: | |
| Form | Fluid |
| Colour | Colourless |
| Odour | Alcohol-like |
| Odour threshold | Not determined |
| pH-value | Not determined |
| Change in condition: | |
| Melting point/Melting range | -114.5 ° C |
| Boiling point/Boiling range | 78 ° C |
| Flash point | 13 °C |
| Ignition temperature | 425 °C |
| Self-igniting | Product is not self igniting |
| Danger of explosion | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| Explosion limits: | |
| Lower | 3.5 Vol % |
| Upper | 15 Vol % |
| Vapour pressure at 20 °C | 59 hPa |
| Density at 20 °C | 0.794 g/cm ³ |
| Relative density | Not determined |
| Vapour density | Not determined |
| Evaporation rate | Not determined |
| Solubility in/Miscibility with water | Soluble |
| Partition coefficient (n-octanol/water) | Not determined |
| Viscosity: | |
| Dynamic | Not determined |
| Kinematic | Not determined |
| Other information | No further relevant information available |

Section 10: Stability and Reactivity

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| 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. |

Section 11: Toxicological Information

Information on toxicological effects:

Acute toxicity:

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| LD/LC50 values relevant for classification | Oral LD50 >5000 mg/kg (rat) |
| Primary irritant effect: | |
| On the skin | No irritant effect. |
| On the eye | No irritating effect. |
| Sensitization | Sensitization possible through skin contact. |
| Additional toxicological information: | The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant. |

Section 12: Ecological Information

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| Toxicity: | |
| Aquatic toxicity | No further relevant information available. |
| Persistence and degradability | No further relevant information available. |
| Behaviour 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 (German Regulation) (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. |

Section 13: Disposal Considerations


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| Waste treatment methods: | |
| Recommendation | Must not be disposed together with household garbage. Do not allow product to reach sewage system. |

European waste catalogue

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| 18 01 06* | chemicals consisting of or containing dangerous substances |
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| Uncleaned packaging: | |
| Recommendation | Disposal must be made according to official regulations. |
| Recommended cleansing agents | Water, if necessary together with cleansing agents. |

Section 14: Transport Information

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| UN Number | 1170 |  <p>Flammable</p> |
| DG Proper Shipping Name | Ethanol Solution | |
| DG Class and subsidiary risk | Class 3 Highly flammable | |
| Packing group | II | |
| Hazchem code | 2(Y)E | |
| Dangerous goods segregation | This product is classified as Dangerous Goods Class 3, packing group II. Please consult NZS 5433 Safe Transport of Dangerous Goods for more information. | |

Section 15: Regulatory Information

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| NZ Group Standard & EPA Approval Code | Surface Coatings and Colourants (Flammable) HSR002662 |
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HSNO Controls:

Trigger quantities for this substance:

| | Trigger Quantity |
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| Approved Handler | Any quantity in a situation where vapour - air mixtures could ignite *Registered dentists are deemed approved handlers when using as finished formed medicines |
| Location Certificate | 100 L (>5 L), 250 L (<5 L); 50 L open |
| Tracking Trigger Quantities | Not applicable |
| Signage Trigger Quantities | 250 L (liquid) / kg (solid) |
| Emergency Response Plan Trigger Quantities | 1,000 L (liquid) / kg (solid) |

Section 16: Other Information

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| Relevant R-phrases: | R11 | Highly flammable. |
| | R36/37/38 | Irritating to eyes, respiratory system and skin. |
| | R36/38 | Irritating to eyes and skin. |
| | R43 | May cause sensitisation by skin contact. |

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