

# Material Safety Data Sheet

according to NOHSC:2011(2003)



**Product name :** Ivoclar Vivadent Variolink Esthetic DC (Base)  
**Statement of Hazardous Nature :** This product is classified as: Non Hazardous according to criteria of National Occupational Health and Safety Commission.  
**Revision :** 02.10.2014 **Version :** 1.0.0  
**Print date :** 02.10.2014

## 01. Identification of substances, preparation and company

**Product name:** Ivoclar Vivadent Variolink Esthetic DC (Base)  
**Use of the substance / preparation:** Dual curing resin base dental luting material  
**Manufacturer / Supplier:** Ivoclar Vivadent AG  
**Street / P O Box:** Benderstrasse 2  
**Country code / Postal Code / Town / City:** FL-9494 Schaan  
Principality of Liechtenstein  
**Telephone:** + 423 235 35 35  
**Telefax:** + 423 235 33 60  
**Distributor:** Ivoclar Vivadent Pty Ltd  
1 – 5 Overseas Drive  
Noble Park North VIC 3174  
Australia  
**Telephone:** + 61 3 9795 9599  
**Telefax:** + 61 3 9795 9645  
**Emergency information:** Poisons Information Centre: Dial 13 11 26  
24 hours a day, 7 days a week – Australia wide

## 02. Hazards identification

### Statement of Hazardous Nature

This product is classified as: Non Hazardous according to criteria of National Occupational Health and Safety Commission.

### Hazard designation

Classification: Not classified as a dangerous good for transport.

ADG Classification: Not classified

UN Number: Not classified

### Particular information pertaining specific risk for human and environment

#### R phrases

R22 Harmful if swallowed.  
R25 Toxic if swallowed.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R43 May cause sensitisation by skin contact.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### S phrases

S2 Keep out of the reach of children.  
S24/25 Avoid contact with skin and eyes.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S28 After contact with skin, wash immediately with plenty of water and soap.  
S37/39 Wear suitable gloves and eye/face protection.

## 03. Composition / information on ingredients

### Chemical characterisation

Mixture of ytterbium trifluoride, urethane dimethacrylate, glycerine-1.3 dimethacrylate, decamethylene dimethacrylate, acetyl-2-thiourea, 2.6 di-tert-butyl-p-cresol and other non-hazardous materials.

### Hazardous components

CAS NO: 13760-80-0	20-<25%	Ytterbium trifluoride	EINECS: 237-354-2	Xi: R36/37/38
CAS NO: 72869-86-4	3-<10%	Urethane dimethacrylate	EINECS: 276-957-5	Xi: R36 R43 R52/53
CAS NO: 1830-78-0	3-<10%	Glycerin-1.3-dimethacrylate	EINECS:	N: R52
CAS NO: 6701-13-9	3-<10%	Decamethylene dimethacrylate	EINECS: 229-745-1	Xi: R36 R43
CAS NO: 591-08-2	0.3-<1%	Acetyl-2-thiourea	EINECS: 209-699-9	T: R25
CAS NO: 128-37-0	0.1-<0.3%	2.6 Di-tert-butyl-p-cresol	EINECS: 204-881-4	Xi: R36/38 Xn: R22 N: R51/53

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**Dangerous component / Risk phrases:**

R22	Harmful if swallowed.
R25	Toxic if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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**04. First-aid measures**

**General**

Immediately remove all contaminated clothing. Let in fresh air. In case of unconsciousness, place patient stably in side position and seek medical assistance immediately.

**After inhalation**

Let in fresh air. Remove to fresh air. Seek medical assistance immediately.

**After skin contact**

After contact with skin, wash immediately with plenty of water. Seek medical assistance immediately.

**After eye contact**

Flush with plenty of water (10 – 15 minutes) and seek medical assistance immediately.

**After ingestion**

Rinse out mouth and drink plenty of water. Do not induce vomiting. Seek medical assistance immediately.

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**05. Fire-fighting measures**

**Suitable extinguishing media**

Carbon dioxide, extinguishing powder, water spray. Fight larger fires with water spray and alcohol resistant foam.

**Unsuitable extinguishing media**

Waterjet.

**Special risk posed by the substance or by the actual preparation, its combustion products or gases discharged**

Prevent from flowing into effluent, ground water, surface water or the soil.

**Special protective equipment**

When extinguishing fires, use breathing apparatus with an independent source of air.

Firefighters should wear full protective clothing including self-contained breathing apparatus.

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**06. Accidental release measures**

**Personal precautions**

Wear suitable protective clothing, gloves and eye / face protection.

**Environmental precautions**

Prevent from flowing into effluent, ground water, surface water or the soil.

Complete the disposal in compliance with all applicable Local, State and Federal government regulations.

**Methods for cleaning up / collecting**

Do not allow to flow off into effluent, ground water, surface water or the soil...

Take up with a mechanical source and precede according to the water disposal regulations.

Clean up with liquid binding material (sand, dolomite, acid binders, universal binders and sawdust).

Complete the disposal in compliance with all applicable Local, State and Federal government regulations.

**Additional information**

Prevent skin and eye contact.

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**07. Handling and storage**

**Information for safe handling**

Keep out of reach of children.

Only adequately trained personnel should handle this product.

When using – do not eat, drink or smoke.

**Information about protection against explosions and fires**

No anti-explosion measures necessary.

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### Requirements to be met by storerooms and containers

Store only in original container.  
 Store in a dry, well-ventilated area in the original container. Keep container tightly closed.  
 Store at 2 – 28°C / 36 – 82°F. Do not store in open sunshine. Keep away from heat source.

### Information about separation of incompatible products

Store foodstuffs separately.

## 08. Exposure controls and personal protection

### Additional information about engineering measures

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

### Components with critical values that require monitoring at the workplace (exposure limits)

None.

Specifications: TWA (AUS)  
 Value: MAK 0mg/m<sup>3</sup>

### Personal protective equipment

Do not eat or drink during work. No smoking.  
 Keep away from food, drink and animal feeding stuff.  
 Avoid contact with skin and eyes.

### Respiratory protection

Provide for good ventilation.

### Hand protection

Short-term exposure (<30mins): disposable gloves, eg: nitrile rubber, material thickness 0.1mm (Australian Standard 2161). Long-term exposure (Level 6: < 480min): protective gloves, eg: nitrile rubber, material thickness 0.7mm (Australian Standard 2161).

Commercial medical gloves do not provide protection against the sensitising effect of methacrylates.  
 Check penetration time for the specific gloves used with the glove manufacturer. Solvent resistant gloves.

### Eye protection

Avoid contact with eyes. Use tightly fitting safety glasses (Australian Standard AS 1336 and AS/NZS 1337).  
 An eyewash fountain should be located in the immediate working area. Wear eye protection when mixing or using. Use approved close fitting safety goggles and / or visor for splash protection.

### Body protection

No particular measures required.

## 09. Physical and chemical properties

### Image

Form: Pasty  
 Colour: According to product specification  
 Odour: Characteristic

### Relevant safety data

Melting point/range:	(1013 hPa)		Undetermined	°C	DIN 51755
Casting point/range:	(1013 hPa)	ca.	Undetermined	°C	
Flash point:			n/a	°C	
Ignition temperature			n/a	°C	
Viscosity:			Not determined	mPas	
Vapour pressure:			n/a	mbar	
Density:	(20°C)		1.8567	g/cm <sup>3</sup>	
Solubility in water:	(20°C)		Nearly insoluble	g/l	
pH value:			n/a		

## 10. Stability and reactivity

### Conditions to avoid

Stable under normal handling and storage conditions.  
 Photo-reactive – danger of polymerisation.

### Materials to avoid

No further relevant information available.

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### Hazardous decomposition products

No further relevant information available.

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## 11. Toxicological information

### Toxicological tests

#### Primary irritant effect

Prolonged or repeated exposure may cause drying or irritation of the eyes, skin and mucous membranes. Ingestion and prolonged exposure to skin and eyes should be avoided, as should inhalation of any generated vapours.

#### Sensitisation

Prolonged or repeated exposure may cause drying or irritation of the eyes, skin and mucous membranes. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals.

#### Experience on practice

Prolonged or repeated exposure may cause drying or irritation of the eyes, skin and mucous membranes. Ingestion and prolonged exposure to skin and eyes should be avoided, as should inhalation of any generated vapours

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## 12. Ecological information

### Details on elimination (persistence / degradability)

#### Abiotoxic elimination

No data available.

#### Biological degradation / elimination

Slightly hazardous for water.

Prevent from flowing into effluent, ground water, surface water or the soil...

#### Fate in environmental compartments

Slightly hazardous for water.

Prevent from flowing into effluent, ground water, surface water or the soil.

#### Ecotoxicological effects

#### Performance in sewage/treatment plants

Slightly hazardous for water.

Prevent from flowing into effluent, ground water, surface water or the soil.

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## 13. Disposal consideration

### Product

Concentrate: Avoid contamination of ground water or waterways.

The product must not enter effluent, ground water, surface water or the soil.

Clean up with liquid binding material (sand, dolomite, acid binders, universal binders and sawdust).

Complete the disposal in compliance with all applicable Local, State and Federal government regulations.

### Contaminated packaging

Contaminated packaging must be emptied of all residues and, following appropriate cleaning, may be sent to a recycling plant. Un-cleaned packaging must be disposed of in the same manner as the medium.

Responsibility for proper waste disposal rests with the generator of the waste.

Dispose of any waste material (including containers) in accordance with all applicable Local, State and Federal government regulations regarding waste management methods.

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## 14. Transport information

### Land transport ADG

Classification: Not classified as a dangerous good for transport.

ADG Class: | not classified

UN Number: | not classified

### Maritime transport IMDG

Classification: Not classified as a dangerous good for transport.

ADNR Class: | not classified

UN Number: | not classified

### Air transport ICAO-TI and IATA-DGR

Classification: Not classified as a dangerous good for transport.

ICAO/IATA Class: | not classified

UN Number: | not classified

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## 15. Regulatory information

### Danger symbol and danger designation

none

### Hazard-determining components of labelling

none

### R phases

R22	Harmful if swallowed.
R25	Toxic if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### S phrases

S2	Keep out of the reach of children.
S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28	After contact with skin, wash immediately with plenty of water and soap.
S37/39	Wear suitable gloves and eye/face protection.

## 16. Other information

### Processing instructions / technical data sheets

Please observe the label / directions for use.

### Further information

**Important Note:** The above-mentioned data correspond to our present state of knowledge and experience as of the date noted and are for use only as a guide in connection with occupational health and safety. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications do not have the meaning of guarantees on the properties of the product.

We make no representation, guarantee or warranty, express or implied, as to the accuracy, reliability or completeness of the information and assume no responsibility for injury damage or loss resulting from the use of the material.

### Contact

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**Tel:** + 61 3 9795 9599

This data is based on our present knowledge; however, this shall not constitute a guarantee for any specific product features and shall not establish a legally contractual relationship.