

# Material Safety Data Sheet

according to NOHSC:2011(2003)



**Product name :** Ivoclar Vivadent SR Ivolen Liquid  
**Statement of Hazardous Nature :** This product is classified as: Hazardous according to criteria of National Occupational Health and Safety Commission.  
**Revision :** 28.10.2013      **Version :** 1.0.1  
**Print date :** 28.10.2013

## 01. Identification of substances, preparation and company

**Product name:** Ivoclar Vivadent SR Ivolen Liquid  
**Use of the substance / preparation:** Custom Tray 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: Hazardous according to criteria of National Occupational Health and Safety Commission.

### Hazard designation

Classification: ADG6



R11 - Highly flammable

ADG Classification: Class 3

UN Number: 1247

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

#### R phrases

R11 Highly flammable.  
R43 May cause sensitisation to skin on contact.  
R36/37/38 Irritating to eyes, respiratory system and skin.

#### S phrases

S2 Keep out of the reach of children.  
S9 Keep container in a well-ventilated place.  
S16 Keep away from sources of ignition - no smoking.  
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.  
S29 Do not empty into drains.  
S33 Take precautionary measures against static discharge.  
S37/39 After contact with skin, wash immediately with plenty of water and soap. Wear suitable gloves and eye/face protection.

## 03. Composition / information on ingredients

### Chemical characterisation

Mixture of Methyl methacrylate stab. Paraffin oil and Diethanolamine-p-toluidine.

### Hazardous components

CAS No. 80-62-6 89.5 % Methylmethacrylate.

CAS No. 3077-12-1 0.5 % Diethanolamine-p-toluidine.

### Dangerous component / Risk phrases:

R11 Highly flammable.  
R43 May cause sensitisation to skin on contact.  
R36/37/38 Irritating to eyes, respiratory system and skin.

## 04. First-aid measures

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## General

Immediately remove all contaminated clothing.

### After inhalation

Let in fresh air. Remove to fresh air. Seek medical assistance immediately should the air passage be affected.

### After skin contact

After contact with skin, wash immediately with plenty of water and soap. Wear suitable gloves and eye/face protection.

### After eye contact

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

### After ingestion

Drink plenty of water. Do not induce vomiting. Seek medical assistance immediately.

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## 05. Fire-fighting measures

### Suitable extinguishing media

Water fog, carbon dioxide, foam, dry chemicals, Extinguishing powder.

### Unsuitable extinguishing media

Not known.

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

Cool containers in the vicinity of the blaze using water spray.

Prevent any spillage from entering drains or watercourses.

### 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 surface water / ground water. 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 the drains, surface water / ground water.

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

Clean up with absorbent material such as sawdust, diatomaceous earth or universal absorbents.

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

### Additional information

Prevent skin and eye contact. Clean up with absorbent material. Remove according to regulations.

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## 07. Handling and storage

### Information for safe handling

Containers to be opened and handled with care. Make sure ventilation is adequate. Use only in a well-ventilated area.

Only adequately trained personnel should handle this product.

Keep out of reach of children.

When using – do not eat, drink or smoke.

### Information about protection against explosions and fires

No anti-explosions measures necessary.

### 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.

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## 08. Exposure controls and personal protection

### Additional information about engineering measures

ACGIH (USA) Threshold Limit Value (TLV) is 50 mg/m<sup>3</sup> TWA (Time Weighted Average) - 8 hours.

Hygienists, (USA) Threshold Limit Value (TLV) is 100 ppm (Ceiling).

Lower: 2.1 Vol %

Upper: 1.5 Vol %

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

Specifications: TWA (AUS)

Value: MAK 50ml/m<sup>3</sup> (ppm) 100mg/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. Avoid vapour or spray mist. Use in a well-ventilated area.

### 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

Use tightly fitting safety glasses (Australian Standard AS 1336 and AS/NZS 1337). An eyewash fountain should be located in the immediate working area. Avoid contact with eyes. Contact with eyes, even for short periods can cause blindness. 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:	Clear Liquid
Colour:	Colourless
Odour:	Characteristic

### Relevant safety data

Melting point/range:	(1013 hPa)		-48	°C	DIN 51755
Casting point/range:	(1013 hPa)	ca.	+103	°C	
Flash point:			10	°C	
Ignition temperature			430	°C	
Viscosity:			0.6	mPas	
Vapour pressure:			40	mbar	
Density:	(20°C)		0.943	g/cm <sup>3</sup>	
Solubility in water:	(20°C)		1.6	g/l	
pH value:			Not determined		

## 10. Stability and reactivity

### Conditions to avoid

Avoid excessive heat and direct sunlight.

In the presence of radical initiators (e.g. peroxides), polymerisation with heat build-up may occur.

### Materials to avoid

None is used in accordance to instructions.

### Hazardous decomposition products

The product is highly flammable. Avoid ignition sources such as flames or spark producing equipment.

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## 11. Toxicological information

### Toxicological tests

#### LD50 / LC50 values that are relevant for classification

<b>Specification:</b>	LD-50
<b>Test species:</b>	Oral for rat
<b>Value / dosage:</b>	7'900 mg/kg
<b>Specification:</b>	LC-50
<b>Test species:</b>	Rat
<b>Value / dosage:</b>	3'750 ppm

#### Primary irritant effect

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

#### Sensitisation

Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals.

#### Experience on practice

Excessive exposure may cause eye and respiratory irritation.

## 12. Ecological information

### Details on elimination (persistence / degradability)

#### Abiotoxic elimination

No data available.

#### Biological degradation / elimination

No data available.

#### Fate in environmental compartments

No ecological problems to be anticipated if properly handled and used.

Nearly insoluble

#### Ecotoxicological effects

#### Performance in sewage/treatment plants

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

No ecological problems to be anticipated if properly handled and used.

Nearly insoluble.

## 13. Disposal consideration

### Product

Concentrate: Avoid contamination of ground water or waterways. Remove with fluid-absorbing material (e.g. sand, universal absorbent). 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

## 14. Transport information

### Land transport ADG

Classification: ADG6



Flammable Liquids

ADG Class: Class 3 Flammable liquids

UN Number: 1247

ADR/RID: 3

Danger code (Kemler): 339

Packing Group: II

UN proper shipping name: Methyl (methylacrylates monomer stabilised).

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## Maritime transport IMDG

Classification: ADG6



Flammable Liquids

ADNR Class: Class 3 Flammable liquids  
UN Number: 1247  
ADR/RID: 3  
IMGD CODE 32-04  
MFAG 330 EMS F-E, S-D  
Packing Group: II

UN proper shipping name: Methyl (methylacrylates monomer stabilised).

## Air transport ICAO-TI and IATA-DGR

Classification: ADG6



Flammable Liquids

ICAO/IATA Class: Class 3 Flammable liquids  
UN Number: 1247  
ADR/RID: 3  
Packing Group: II  
Packing Instructions: 305 – Passenger plane: Max 5L / Cargo plane: Max 60L  
UN proper shipping name: Methyl (methylacrylates monomer stabilised).

## 15. Regulatory information

### Danger symbol and danger designation



Flammable Liquids

### Hazard-determining components of labelling

Methylmethacrylate and Diethanolamine-p-toluidine.

### R phrases

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### S phrases

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## 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.

**Date of Issue of Original:** 15th November 2010

This is a medical device classified under the requirement of EU and TGA.

### **Contact**

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**Tel:** + 61 3 9795 9599

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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.

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