

Material Safety Data Sheet Cover-Sheet – This page provides additional New Zealand specific information for this product and must be read in conjunction with the Safety Data Sheet (SDS) attached

Product Name: LC Block-Out Resin

Manufacturer: Ultradent

SDS Expiry: 28 July 2028

Supplier Details: Henry Schein New Zealand  
243-249 Bush Road, Rosedale, Auckland, 0632  
PO Box 101 140, North Shore, Auckland 0745  
Ph. 0800 808 855  
[www.henryschein.co.nz](http://www.henryschein.co.nz)

Emergency Contacts: Poisons/Hazardous Chemical Info Centre –  
0800POISON/0800764766 (24 Hours)  
Phone 111 for Fire, Ambulance or Police

HSNO Class/Category: 6

HSNO Group Standard: Dental Products Subsidiary Hazard Group Standard 2020  
HSR002558

Statements/Pictograms: As per attached Safety Data Sheet (SDS)

Date Prepared: This coversheet was prepared – September 2023

This SDS coversheet has been produced by Henry Schein NZ and has been prepared in accordance with NZ EPA advice on making overseas SDS compliant to HSNO Act. The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with respect to the quality or the specifications of the product. Users must satisfy that the product is entirely suitable for their purpose. The SDS and this coversheet may be revised from time to time, please ensure you have a current copy.

## Safety Data Sheet

according to WHS Regulations

Printing date 28.07.2023

Revision: 28.07.2023

### 1 Identification

- **Product identifier**
- **Trade name:** *Ultradent™ LC Block-Out Resin*
- **Article number:** *SDS 30-001.13R01, 10318*
- **Relevant identified uses of the substance or mixture and uses advised against** *Dental laboratory resin*
- **Application of the substance / the mixture** *Dental Laboratory Resin*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Ultradent Products, Inc.*  
*505 W. Ultradent Drive (10200 S)*  
*South Jordan, UT 84095-3942*  
*USA*  
*onlineordersupport@ultradent.com*  
*Ultradent Australia Pty Ltd.*  
*Level 22/2 Market Street*  
*Sydney NSW 2000*  
*Australia*  
*Email: info.anz@ultradent.com*  
*Toll Free: 1-800-290929*
- **Further information obtainable from:** *Customer Service*
- **Emergency telephone number:**  
*CHEMTREC (NORTH AMERICA) : (800) 424-9300*  
*(INTERNATIONAL) : +(703) 527-3887*

### 2 Hazard(s) Identification

- **Classification of the substance or mixture**



*Skin Sens. 1 H317 May cause an allergic skin reaction.*

- **Label elements**
- **GHS label elements** *The product is classified and labelled according to the Globally Harmonised System (GHS).*
- **Hazard pictograms** *GHS07*
- **Signal word** *Warning*
- **Hazard-determining components of labelling:**  
*Diurethane Dimethacrylate*  
*Triethylene Glycol Dimethacrylate*
- **Hazard statements**  
*H317 May cause an allergic skin reaction.*
- **Precautionary statements**  
*P101 If medical advice is needed, have product container or label at hand.*  
*P102 Keep out of reach of children.*  
*P103 Read label before use.*  
*P261 Avoid breathing dust/fume/gas/mist/vapours/spray.*  
*P280 Wear protective gloves.*

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- P362+P364 Take off contaminated clothing and wash it before reuse.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P321 Specific treatment (see on this label).  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition and Information on Ingredients

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

- **Dangerous components:**

72869-86-4	Diurethane Dimethacrylate	>60-<80%
	⚠ Skin Sens. 1, H317	
109-16-0	Triethylene Glycol Dimethacrylate	>10-<30%
	⚠ Skin Sens. 1, H317	
	Trade Secret	<1%
	⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Serious eye damage/irritation – Category 2A, H319; Skin Sens. 1, H317; Flam. Liq. 4, H227	

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### 4 First Aid Measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**  
 This product is a viscous gel, therefore chance of inhalation is extremely low.  
 Seek medical treatment in case of complaints.  
 Supply fresh air and to be sure call for a doctor.  
 In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**  
 Rinse out mouth and then drink plenty of water.  
 Seek medical treatment.
- **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 Fire Fighting Measures

- **Suitable extinguishing agents:**  
 Water spray  
 Foam  
 Fire-extinguishing powder  
 Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture**  
 Carbon monoxide (CO)  
 Nitrogen oxides (NOx)  
 During fire, gases hazardous to health may be formed.

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· **Protective equipment:** Wear fully protective suit.

### 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).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.

### 7 Handling and Storage

- **Handling:**
- **Precautions for safe handling:**  
Keep receptacles tightly sealed.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**  
Store away from oxidising agents.  
Store away from foodstuffs.
- **Further information about storage conditions:** See product labelling.
- **Specific end use(s)** Dental Laboratory Resin

### 8 Exposure controls and personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients 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 valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Do not eat or drink while working.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

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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 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 breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Goggles recommended during refilling

- **Body protection:** Protective work clothing

## 9 Physical and Chemical Properties

- **General Information**

- **Appearance:**

- **Form:**

Medium Viscosity

- **Colour:**

Blue

- **Odour:**

Methacrylate

- **Odour threshold:**

Not determined.

- **pH-value:**

Not applicable (non-aqueous)

- **Change in condition**

- **Melting point/freezing point:**

<25 °C

- **Initial boiling point and boiling range:**

>100 °C

- **Flash point:**

Not applicable.

- **Flammability (solid, gas):**

Not applicable.

- **Decomposition temperature:**

260 °C (TGA trace)

- **Auto-ignition temperature:**

Product is not selfigniting.

- **Explosive properties:**

Product does not present an explosion hazard.

- **Explosion limits:**

- **Lower:**

Not determined.

- **Upper:**

Not determined.

- **Vapour pressure:**

Not determined.

- **Density at 20 °C:**

1.1-1.2 g/cm<sup>3</sup>

- **Relative density**

Not determined.

- **Vapour density**

Not determined.

- **Evaporation rate**

Not determined.

- **Solubility in / Miscibility with**

- **water:**

Not miscible or difficult to mix.

- **Partition 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.

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:**  
Light  
UV light
- **Incompatible materials:** Strong oxidizing agents
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

### · **LD/LC50 values relevant for classification:**

#### **72869-86-4 Diurethane Dimethacrylate**

Oral	LD50	>5,000 mg/kg (rat)
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#### **109-16-0 Triethylene Glycol Dimethacrylate**

Oral	LD50	>5,000 mg/kg (rat)
	LC50 Fish	16.4 mg/l (Fish) (Toxicity to fish)
Dermal	LD50	>2,000 mg/kg (mouse)

#### **Trade Secret**

Oral	LD50	1,550 mg/kg (rat)
	LC50 Fish	19 mg/l (Fish)
Dermal	LD50	2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	96 mg/l (rat)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

## 12 Ecological Information

### · **Toxicity**

#### · **Aquatic toxicity:**

#### **72869-86-4 Diurethane Dimethacrylate**

EC50	>0.6 mg/kg (Algae)
Biodegradability	28 days (Aerobic) (Biodegradability testing)

#### **109-16-0 Triethylene Glycol Dimethacrylate**

EC50	>100 mg/kg (Algae)
Biodegradability	28 days (Aerobic) (Biodegradability testing)
Aqua toxicity	32 mg/l (daphnia) (No Observed Effect Concentration)

#### **Trade Secret**

EC50	42 mg/kg (Algae)
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- **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.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
*Dispose of contents/container in accordance with international, federal, state, and local regulations.*
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

· <b>UN-Number</b>	
· <b>ADG, IMDG, IATA</b>	not regulated
· <b>UN proper shipping name</b>	
· <b>ADG, IMDG, IATA</b>	not regulated
· <b>Transport hazard class(es)</b>	
· <b>ADG, ADN, IMDG, IATA</b>	
· <b>Class</b>	not regulated
· <b>Packing group</b>	
· <b>ADG, IMDG, IATA</b>	not regulated
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Not Applicable
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	not regulated

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· <b>Australian Inventory of Industrial Chemicals</b>	
72869-86-4	Diurethane Dimethacrylate
109-16-0	Triethylene Glycol Dimethacrylate

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	Trade Secret
	Trade Secret
27306-78-1	Polyalkyleneoxide Modified Heptamethyltrisiloxane
1345-16-0	Dark Blue Pigment
68186-87-8	Cobalt Zinc Aluminate Blue Spinel
	Trade Secret
10373-78-1	Camphorquinone
67674-67-3	Polyalkyleneoxide Modified Heptamethyltrisiloxane
68186-85-6	Cobalt Titanate Green Spinel

**· Standard for the Uniform Scheduling of Medicines and Poisons**

None of the ingredients is listed.

**· Australia: Priority Existing Chemicals**

None of the ingredients is listed.

**· Directive 2012/18/EU**
**· Named dangerous substances - ANNEX I** None of the ingredients is listed.

**· Chemical safety assessment:**

Device is biocompatible when used as directed by dental professionals per ISO 10993-1

## 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.

**· Relevant phrases from Section 3**

H227 Combustible liquid.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

**· Department issuing SDS: Environmental, Health, and Safety**
**· Contact: Customer Service**
**· Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Serious eye damage/irritation – Category 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

**· \* Data compared to the previous version altered.**