

## Safety Data Sheet in accordance with HSNO

Printing date 27.07.2020



Version number 1

Revision: 27.07.2020

### 1 Identification of the substance or mixture and of the supplier

- **Product identifier**
- **Trade name:** G-CEM ONE - Paste B
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Auxillary for dental technology
- **Details of the supplier of the safety data sheet**  
Henry Schein Dental  
23 William Pickering Drive, Albany  
Auckland 0632, NEW ZEALAND  
  
PO Box 101140, NSMC  
Auckland 0745, NEW ZEALAND  
  
Free Phone: 0800 808 855
- **Further information obtainable from:** Regulatory affairs
- **Emergency telephone number:** 0800 764 766 (National Poisons Centre)

### 2 Hazards identification

- **Classification of the substance or mixture**  
Flam. Liq. 4 H227 Combustible liquid.  
Acute Tox. 5 H333 May be harmful if inhaled.  
Skin Corr. 1A H314 Causes severe skin burns and eye damage.  
Eye Dam. 1 H318 Causes serious eye damage.  
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).
- **Exemptions**  
The product, regulated as an invasive medical device by the Regulation (EC) 2017/745, is exempted from labelling requirements for substances and mixtures (according to the provision of the Art 1.5).
- **Hazard pictograms**  
  
GHS05 GHS07
- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Urethane Dimethacrylate (UDMA)  
 $\alpha,\alpha$ -dimethylbenzyl hydroperoxide  
6-tert-butyl-2,4-xyleneol
- **Hazard statements**  
Combustible liquid.  
May be harmful if inhaled.

(Contd. on page 2)

## Safety Data Sheet in accordance with HSNO

Printing date 27.07.2020

Version number 1

Revision: 27.07.2020

**Trade name: G-CEM ONE - Paste B**

(Contd. of page 1)

*Causes severe skin burns and eye damage.*

*May cause an allergic skin reaction.*

· **Precautionary statements**

*Keep away from flames and hot surfaces. No smoking.*

*Do not breathe dusts or mists.*

*Wear protective gloves/protective clothing/eye protection/face protection.*

*IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*Immediately call a POISON CENTER/doctor.*

*Specific treatment (see on this label).*

*Take off contaminated clothing and wash it before reuse.*

*Store locked up.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/Information on ingredients

· **Chemical characterisation: Mixtures**

· **Description:**

*Only substances required to be mentioned according to Annex II of regulation 1907/2006 are listed. Information on the other substances that may be present can be obtained upon request.*

· **Dangerous components:**

CAS: 72869-86-4 EINECS: 276-957-5	Urethane Dimethacrylate (UDMA) Skin Sens. 1, H317	25-<50%
CAS: 1830-78-0 EINECS: 217-388-4	2-Hydroxy-1,3 dimethacryloxypropane Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	5-<10%
CAS: 85590-00-7	methacryloyloxydecyl dihydrogen phosphate Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335	2.5-<5%
CAS: 80-15-9 EINECS: 201-254-7	$\alpha,\alpha$ -dimethylbenzyl hydroperoxide Self-react. C, H242; Org. Perox. E, H242; Acute Tox. 3, H331; STOT RE 2, H373; Skin Corr. 1B, H314; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H312; Flam. Liq. 4, H227	0.5-<1%
CAS: 1879-09-0 EINECS: 217-533-1	6-tert-butyl-2,4-xylenol Acute Tox. 2, H310; Acute Tox. 3, H331; STOT RE 2, H373; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Aquatic Acute 2, H401	$\geq 0.2$ -<0.25%

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

### 4 First aid measures

· **Description of first aid measures**

· **General information:**

*Immediately remove any clothing soiled by the product.*

*If symptoms persist consult doctor.*

(Contd. on page 3)

## Safety Data Sheet in accordance with HSNO

Printing date 27.07.2020

Version number 1

Revision: 27.07.2020

**Trade name: G-CEM ONE - Paste B**

(Contd. of page 2)

- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Take affected persons into fresh air and keep quiet.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
Seek medical treatment.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Protect unharmed eye.  
Rinse opened eye for several minutes under running water.  
Call a doctor immediately.
- **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** Allergic reactions
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.  
No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Remove persons from danger area.  
Avoid contact with the eyes and skin.  
Wear protective clothing.
- **Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to penetrate the ground/soil.  
In case of seepage into the ground inform responsible authorities.
- **Methods and material for containment and cleaning up:**  
Use neutralising agent.  
Absorb liquid components with liquid-binding material.  
Dispose of the material collected according to regulations.
- **Reference to other sections**  
See Section 7 for information on safe handling.

(Contd. on page 4)

## Safety Data Sheet in accordance with HSNO

Printing date 27.07.2020

Version number 1

Revision: 27.07.2020

**Trade name: G-CEM ONE - Paste B**

(Contd. of page 3)

See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.  
Avoid contact with the eyes and skin.
- **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 unopened original receptacles.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

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

#### · DNELs

##### 1879-09-0 6-tert-butyl-2,4-xyleneol

Inhalative	DNEL inhalation	0.14 mg/m <sup>3</sup> (man)
------------	-----------------	------------------------------

- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.  
Avoid contact with the eyes and skin.  
Wash hands before breaks and at the end of work.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing
- **Respiratory protection:** Suitable respiratory protective device recommended.
- **Protection of hands:**



Protective gloves

#### · **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.

(Contd. on page 5)

## Safety Data Sheet in accordance with HSNO

Printing date 27.07.2020

Version number 1

Revision: 27.07.2020

Trade name: G-CEM ONE - Paste B

(Contd. of page 4)

- **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:**



Tightly sealed goggles

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Pasty
Colour:	White
Odour:	Ester-like
Odour threshold:	Not determined.

- pH-value at 20 °C: 1.5

- **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

- Flash point: 93 °C

- Flammability (solid, gas): Not applicable.

- Ignition temperature: Undetermined.

- Decomposition temperature: Not determined.

- 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: 1.5 g/cm<sup>3</sup>

- Relative density: Not determined.

- Vapour density: Not determined.

- Evaporation rate: Not determined.

- **Solubility in / Miscibility with water:**

Fully miscible.

- Partition coefficient: n-octanol/water: Not determined.

- **Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

(Contd. on page 6)

## Safety Data Sheet in accordance with HSNO

Printing date 27.07.2020

Version number 1

Revision: 27.07.2020

Trade name: **G-CEM ONE - Paste B**

(Contd. of page 5)

- **Solvent content:**  
**VOC (EC)** 0.0 g/l
- **Other information** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **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:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**

- **LD/LC50 values relevant for classification:**

#### 72869-86-4 Urethane Dimethacrylate (UDMA)

Oral	LD50	>5,000 mg/kg (rat female) (OECD 401)
------	------	--------------------------------------

#### 80-15-9 $\alpha,\alpha$ -dimethylbenzyl hydroperoxide

Oral	LD50	382 mg/kg (rat (f+m))
------	------	-----------------------

Dermal	LD50	500 mg/kg (rat (f+m))
--------	------	-----------------------

Inhalative	LC50/4 h	220 mg/l (rat (f+m))
------------	----------	----------------------

#### 1879-09-0 6-tert-butyl-2,4-xyleneol

Oral	LD50	910 mg/kg (rat (f+m)) (OECD 401)
------	------	----------------------------------

Dermal	LD50	<200 mg/kg (rabbit) (OECD 402)
--------	------	--------------------------------

- **Primary irritant effect:**
- **Skin corrosion/irritation** Strong caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation** Sensitisation possible through skin contact.
- **Additional toxicological information:** Corrosive
- **Repeated dose toxicity** No further relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
No further relevant information available.

### 12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

#### 72869-86-4 Urethane Dimethacrylate (UDMA)

EC50/48h (static)	>1.2 mg/l (daphnia magna) (OECD 202)
-------------------	--------------------------------------

(Contd. on page 7)

## Safety Data Sheet in accordance with HSNO

Printing date 27.07.2020

Version number 1

Revision: 27.07.2020

Trade name: **G-CEM ONE - Paste B**

(Contd. of page 6)

- **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:**  
 Must not reach sewage water or drainage ditch undiluted or unneutralised.  
 Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.  
 Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
 Do not allow product to reach ground water, water course or sewage system.  
 Danger to drinking water if even small quantities leak into the ground.
- **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**  
 Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | UN3082   |
| <ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG</b></li> <li>· <b>IATA</b></li> </ul> | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Urethane Dimethacrylate (UDMA))<br>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Urethane Dimethacrylate (UDMA), $\alpha,\alpha$ -dimethylbenzyl hydroperoxide), MARINE POLLUTANT<br>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Urethane Dimethacrylate (UDMA)) |
| <ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>ADR</b></li> </ul>  |  |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> </ul>   | 9 (M6) Miscellaneous dangerous substances and articles.  |

(Contd. on page 8)

## Safety Data Sheet in accordance with HSNO

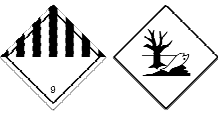
Printing date 27.07.2020

Version number 1

Revision: 27.07.2020

Trade name: **G-CEM ONE - Paste B**

(Contd. of page 7)

· <b>Label</b>	9
· <b>IMDG, IATA</b>	
	
· <b>Class</b>	9 Miscellaneous dangerous substances and articles.
· <b>Label</b>	9
· <b>Packing group</b>	III
· <b>ADR, IMDG, IATA</b>	III
· <b>Environmental hazards:</b>	No
· <b>Marine pollutant:</b>	Symbol (fish and tree)
· <b>Special marking (ADR):</b>	Symbol (fish and tree)
· <b>Special marking (IATA):</b>	Symbol (fish and tree)
· <b>Special precautions for user</b>	Warning: Miscellaneous dangerous substances and articles.
· <b>Hazard identification number (Kemler code):</b>	90
· <b>EMS Number:</b>	F-A,S-F
· <b>Stowage Category</b>	A
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>Transport category</b>	3
· <b>Tunnel restriction code</b>	-
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (URETHANE DIMETHACRYLATE (UDMA)), 9, III

### 15 Regulatory information

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

· <b>New Zealand Inventory of Chemicals</b>	
60676-86-0	Silica, vitreous
72869-86-4	Urethane Dimethacrylate (UDMA)

(Contd. on page 9)



## Safety Data Sheet in accordance with HSNO

Printing date 27.07.2020

Version number 1

Revision: 27.07.2020

Trade name: **G-CEM ONE - Paste B**

(Contd. of page 8)

1830-78-0	2-Hydroxy-1,3 dimethacryloxypropane
2530-85-0	3-trimethoxysilylpropyl methacrylate
80-15-9	$\alpha, \alpha$ -dimethylbenzyl hydroperoxide
6381-92-6	Ethylene diaminetetraacetic acid sodium salt
1879-09-0	6-tert-butyl-2,4-xylenol

· **HSNO Approval numbers**

80-15-9	$\alpha, \alpha$ -dimethylbenzyl hydroperoxide	HSR001368
1879-09-0	6-tert-butyl-2,4-xylenol	HSR003625

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS05 GHS07

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

Urethane Dimethacrylate (UDMA)

$\alpha, \alpha$  -dimethylbenzyl hydroperoxide

6-tert-butyl-2,4-xylenol

· **Hazard statements**

Combustible liquid.

May be harmful if inhaled.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

· **Precautionary statements**

Keep away from flames and hot surfaces. No smoking.

Do not breathe dusts or mists.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTER/doctor.

Specific treatment (see on this label).

Take off contaminated clothing and wash it before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **Seveso category E2** Hazardous to the Aquatic Environment

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

· **Relevant phrases**

H227 Combustible liquid.

(Contd. on page 10)

## Safety Data Sheet in accordance with HSNO

Printing date 27.07.2020

Version number 1

Revision: 27.07.2020

**Trade name: G-CEM ONE - Paste B**

(Contd. of page 9)

H242 Heating may cause a fire.  
 H302 Harmful if swallowed.  
 H310 Fatal in contact with skin.  
 H312 Harmful in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H331 Toxic if inhaled.  
 H335 May cause respiratory irritation.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H401 Toxic to aquatic life.  
 H411 Toxic to aquatic life with long lasting effects.

· **Department issuing SDS:** Regulatory affairs

· **Contact:** msds@gc.dental

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport 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)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

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

Self-react. C: Self-reactive substances and mixtures – Type C/D

Org. Perox. E: Organic peroxides – Type E/F

Acute Tox. 4: Acute toxicity - oral – Category 4

Acute Tox. 2: Acute toxicity - dermal – Category 2

Acute Tox. 3: Acute toxicity - inhalation – Category 3

Acute Tox. 5: Acute toxicity - inhalation – Category 5

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

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

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· **Sources**

• ECHA (<http://echa.europa.eu/>)

• EnviChem ([www.echemportal.org](http://www.echemportal.org))

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

This version replaces all previous versions.

**Disclaimer:**

The information contained herein is believed to be true and accurate. However, all statements, recommendations or suggestions are made without any guarantee, representation or warranty, express or implied, on our part. Therefore, no warranty is made or to be implied that the information set out in this document is accurate or complete, and we accordingly exclude all liability in connection with the use of this information or the products referred to herein. All such risks are assumed by the purchaser/user. The information contained herein is also subject to change without notice. For the avoidance of doubt, however, nothing in this document excludes or limits our liability for death or personal injury caused by our negligence or for fraudulent misrepresentation.