

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 30.07.2014

Version 1

Revision: 30.07.2014

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name:** *GC Optiglaze Color (Clear, Orange, Red, Olive, Pink, Grey, Blue, White, White Grey)*

· **1.2 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 techology*

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

*GC EUROPE N.V.*

*Interleuvenlaan 33*

*B-3001 Leuven*

*Tel. +32/(0)16/74.10.00*

*Fax +32/(0)16/40.26.84*

*msds@gceurope.com*

· **Further information obtainable from:** *Regulatory affairs*

· **1.4 Emergency telephone number:**

*National poison center for United Kingdom of Great Britain and Northern Ireland:*

*Belfast: +44 28 90 63 2032*

*Birmingham: +44 121 507 4123*

*Edinburgh: +44 131 242 1383*

*Newcastle Upon Tyne: +44 191 2606182/+44 191 2606180*

*Penarth: +44 292 071 55 54*

### SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

*Xi; Irritant*

*R37/38: Irritating to respiratory system and skin.*

*Xi; Sensitising*

*R43: May cause sensitisation by skin contact.*

*F; Highly flammable*

*R11: Highly flammable.*

· **Classification system:**

*The classification is according to the latest editions of the EU-lists, and extended by company and literature data.*

· **2.2 Label elements**

· **Labelling according to EU guidelines:**

*The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.*

· **Code letter and hazard designation of product:**



*Xi Irritant*

*F Highly flammable*

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

*Methyl methacrylate*

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· **Risk phrases:**

- 11 Highly flammable.
- 37/38 Irritating to respiratory system and skin.
- 43 May cause sensitisation by skin contact.

· **Safety phrases:**

- 9 Keep container in a well-ventilated place.
- 16 Keep away from sources of ignition - No smoking.
- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 24 Avoid contact with skin.
- 37 Wear suitable gloves.
- 60 This material and its container must be disposed of as hazardous waste.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterization: Mixtures**

· **Description:** Mixture: consisting of the following components.

· **Dangerous components:**

|                                                                 |                                                                           |        |
|-----------------------------------------------------------------|---------------------------------------------------------------------------|--------|
| CAS: 80-62-6<br>EINECS: 201-297-1<br>Index number: 607-035-00-6 | Methyl methacrylate<br>Xi R37/38; Xi R43; F R11                           | 50-70% |
| CAS: 75980-60-8<br>EINECS: 278-355-8                            | diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide<br>Xn R62<br>Repr. Cat. 3 | 1-5%   |

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

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.  
If symptoms persist consult doctor.

· **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 wash with water and soap and rinse thoroughly.  
Seek medical treatment.

· **After eye contact:**

Rinse opened eye for several minutes under running water.  
If symptoms persist consult doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.  
If symptoms persist consult doctor.

· **4.2 Most important symptoms and effects, both acute and delayed Allergic reactions**

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- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water
- **5.2 Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 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.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Remove persons from danger area.  
Keep away from ignition sources.  
Avoid contact with the eyes and skin.  
Wear protective clothing.
- **6.2 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.
- **6.3 Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Absorb liquid components with liquid-binding material.  
Dispose of the material collected according to regulations.
- **6.4 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

- **7.1 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:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Do not spray onto a naked flame or any incandescent material.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.

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- 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.
  - Store in cool, dry conditions in well sealed receptacles.
  - Protect from heat and direct sunlight.
  - Store in a cool place.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

#### · 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

##### 80-62-6 Methyl methacrylate

|     |                                                   |
|-----|---------------------------------------------------|
| WEL | Short-term value: 416 mg/m <sup>3</sup> , 100 ppm |
|     | Long-term value: 208 mg/m <sup>3</sup> , 50 ppm   |

- **Additional information:** The lists valid during the making were used as basis.

#### · 8.2 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.

##### · 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

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### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

|                           |                                    |
|---------------------------|------------------------------------|
| · <b>Form:</b>            | Fluid                              |
| · <b>Colour:</b>          | According to product specification |
| · <b>Odour:</b>           | Pungent                            |
| · <b>Odour threshold:</b> | Not determined.                    |

· **pH-value:** Not determined.

· **Change in condition**

|                                       |               |
|---------------------------------------|---------------|
| · <b>Melting point/Melting range:</b> | Undetermined. |
| · <b>Boiling point/Boiling range:</b> | Undetermined. |

· **Flash point:** 10 °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** Undetermined.

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

|                 |            |
|-----------------|------------|
| · <b>Lower:</b> | 2.1 Vol %  |
| · <b>Upper:</b> | 12.5 Vol % |

· **Vapour pressure:** Not determined.

· **Density at 20 °C:** 1.06 g/cm<sup>3</sup>

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with water:** Insoluble.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

· **Dynamic:** Not determined.

· **Kinematic:** Not determined.

· **9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**

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

· **10.3 Possibility of hazardous reactions** No dangerous reactions known.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

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- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values relevant for classification:** No further relevant information available.
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **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
- **Repeated dose toxicity** No further relevant information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
No further relevant information available.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Danger to drinking water if even extremely small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

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

- **European waste catalogue**

|           |                                                                                                                                               |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 18 00 00  | WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care) |
| 18 01 00  | wastes from natal care, diagnosis, treatment or prevention of disease in humans                                                               |
| 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.

### SECTION 14: Transport information

|                                                                                                      |                                                                                                                       |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| · <b>14.1 UN-Number</b><br>· <b>ADR, IMDG, IATA</b>                                                  | UN1247                                                                                                                |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR</b><br>· <b>IMDG, IATA</b>                         | 1247 METHYL METHACRYLATE MONOMER, STABILIZED, mixture<br>METHYL METHACRYLATE MONOMER, STABILIZED, mixture             |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR</b>                                             |                                                                                                                       |
|                     |                                                                                                                       |
| · <b>Class</b><br>· <b>Label</b>                                                                     | 3 (F1) Flammable liquids.<br>3                                                                                        |
| · <b>IMDG, IATA</b>                                                                                  |                                                                                                                       |
|                   |                                                                                                                       |
| · <b>Class</b><br>· <b>Label</b>                                                                     | 3 Flammable liquids.<br>3                                                                                             |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                              | II                                                                                                                    |
| · <b>14.5 Environmental hazards:</b><br>· <b>Marine pollutant:</b>                                   | No                                                                                                                    |
| · <b>14.6 Special precautions for user</b><br>· <b>Danger code (Kemler):</b><br>· <b>EMS Number:</b> | Warning: Flammable liquids.<br>339<br>F-E,S-D                                                                         |
| · <b>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>                | Not applicable.                                                                                                       |
| · <b>Transport/Additional information:</b>                                                           |                                                                                                                       |
| · <b>ADR</b><br>· <b>Limited quantities (LQ)</b><br>· <b>Excepted quantities (EQ)</b>                | 1L<br>Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |
| · <b>Transport category</b><br>· <b>Tunnel restriction code</b>                                      | 2<br>D/E                                                                                                              |

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- |                                   |                                                  |
|-----------------------------------|--------------------------------------------------|
| · <b>IMDG</b>                     |                                                  |
| · <b>Limited quantities (LQ)</b>  | 1L                                               |
| · <b>Excepted quantities (EQ)</b> | Code: E2                                         |
|                                   | Maximum net quantity per inner packaging: 30 ml  |
|                                   | Maximum net quantity per outer packaging: 500 ml |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

- **Relevant phrases**
  - R11 Highly flammable.
  - R37/38 Irritating to respiratory system and skin.
  - R43 May cause sensitisation by skin contact.
  - R62 Possible risk of impaired fertility.
- **Department issuing MSDS:** Regulatory affairs
- **Contact:** msds@gceurope.com
- **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.

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