

Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Replaces Version: 1 / US

Date revised: 14.10.2025

Print date: 14.10.2025

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

### 1.1. Product identifier

FotoDent cast

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/preparation

Light-curing material for the production of residue-free burn-out moldings for dental casting technology

### 1.3. Details of the supplier of the safety data sheet

#### Address/Manufacturer

Dreve Dentamid GmbH  
Max-Planck-Straße 31  
DE-59423 Unna

Telephone no. +49 2303 8807-0

Fax no. +49 2303 8807-29

Information provided by / telephone Department Research & Development: Fax: +49 2303 8807-562

E-mail address of person responsible for this SDS [sicherheitsdatenblatt@dreve.com](mailto:sicherheitsdatenblatt@dreve.com)

### 1.4. Emergency telephone number

Henkel Fire Department / 24h-Emergency-Contact-No.: +49 211 797-3350

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to OSHA Hazard Communication Standard 29 CFR 1910:1200

Classification according to OSHA Hazard Communication Standard 29 CFR 1910:1200  
Skin Sens. 1A H317

### 2.2. Label elements

#### Labelling according to OSHA Hazard Communication Standard 29 CFR 1910:1200

##### Hazard pictograms



##### Signal word

Warning

##### Hazard statements

H317 May cause an allergic skin reaction.

##### Precautionary statements

##### Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Date revised: 14.10.2025

Replaces Version: 1 / US

Print date: 14.10.2025

P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P362+P364 Take off contaminated clothing and wash it before reuse.

**Storage/Disposal**

P501.1 Dispose of contents/container to industrial incineration plant.

**Hazardous component(s) to be indicated on label**

contains 2,2'-ethylenedioxydiethyl dimethacrylate; 7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate; Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

**2.3. Other hazards**

No special hazards have to be mentioned.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

**Hazardous ingredients according to OSHA Hazard Communication Standard 29 CFR 1910:1200**

**7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate**

|               |            |    |  |   |
|---------------|------------|----|--|---|
| CAS No.       | 72869-86-4 |    |  |   |
| Concentration | >=         | 50 |  | % |

**2,2'-ethylenedioxydiethyl dimethacrylate**

|               |          |    |   |      |
|---------------|----------|----|---|------|
| CAS No.       | 109-16-0 |    |   |      |
| Concentration | >=       | 25 | < | 50 % |

**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**

|               |             |   |   |      |
|---------------|-------------|---|---|------|
| CAS No.       | 162881-26-7 |   |   |      |
| Concentration | >=          | 1 | < | 10 % |

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

Remove contaminated clothing immediately and dispose of safely. Adhere to personal protective measures when giving first aid

**After inhalation**

Remove the casualty into fresh air and keep him calm. In the event of symptoms take medical treatment.

**After skin contact**

After contact with skin, wash immediately with plenty of water and soap. Consult a doctor if skin irritation persists.

**After eye contact**



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Replaces Version: 1 / US

Date revised: 14.10.2025

Print date: 14.10.2025

Separate eyelids, wash the eyes thoroughly with water (15 min.). Take medical treatment.

#### **After ingestion**

Call in a physician immediately and show him the Safety Data Sheet. Rinse mouth thoroughly with water. Let plenty of water be drunk in small gulps. Do not induce vomiting.

#### **Adhere to personal protective measures when giving first aid**

First aider: Pay attention to self-protection!

### **4.2. Most important symptoms and effects, both acute and delayed**

Until now no symptoms known so far.

### **4.3. Indication of any immediate medical attention and special treatment needed**

#### **Hints for the physician / hazards**

In the case of swallowing with subsequent vomiting, aspiration of the lungs can occur which can lead to chemical pneumonia or asphyxiation.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Recommended: alcohol resistant foam, CO<sub>2</sub>, powders, water spray/mist, Extinguishing measures to suit surroundings

#### **Non suitable extinguishing media**

Full water jet

### **5.2. Special hazards arising from the substance or mixture**

In case of combustion evolution of dangerous gases possible.

### **5.3. Advice for firefighters**

#### **Special protective equipment for fire-fighting**

Do not inhale explosion and/or combustion gases. In case of combustion use a suitable breathing apparatus. Wear full protective suit.

#### **Other information**

Collect contaminated fire-fighting water separately, must not be discharged into the drains. Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations. Observe manufacturer's / distributor's instructions.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Keep away sources of ignition. Ensure adequate ventilation. Use breathing apparatus if exposed to vapours/dust/aerosol. Avoid contact with skin, eyes and clothing. Use personal protective clothing. Refer to protective measures listed in Sections 7 and 8.

### **6.2. Environmental precautions**

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Retain and dispose of contaminated wash water. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

### **6.3. Methods and material for containment and cleaning up**



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Replaces Version: 1 / US

Date revised: 14.10.2025

Print date: 14.10.2025

Pick up rest with suitable absorbent materials. Do not pick up with the help of saw-dust or other combustible substances. Clean contaminated floors and objects thoroughly, observing environmental regulations. Containers in which spilt substance has been collected must be adequately labelled. Dispose of as prescribed.

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary). Avoid formation of aerosols. Avoid impact, friction and electro-static loading; risk of ignition! Keep container tightly closed.

#### Advice on protection against fire and explosion

Keep away from sources of heat and ignition. No smoking. Take action to prevent static discharges. Avoid impact and friction. Use only explosion-proof equipment. Keep away from combustible material. Wear shoes with conductive soles.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep in original packaging, tightly closed. Storage rooms must be properly ventilated. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

#### Hints on storage assembly

Do not store together with foodstuffs. Do not store with strong oxidizing agents.

#### Further information on storage conditions

Keep under lock and key or accessible only to specialists or people who are authorized. Keep container tightly closed and in a well-ventilated place. Keep in a cool place

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Other information

Contains no substances with occupational exposure limit values.

### 8.2. Exposure controls

#### General protective and hygiene measures

Do not smoke during work time. Hold emergency shower available. Hold eye wash fountain available. Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes. Take off immediately all contaminated clothing. Do not eat or drink during work time. Storage of foodstuffs in work rooms is forbidden. Wash hands before breaks and after work. Clean skin thoroughly after work; apply skin cream.

#### Respiratory protection

Do not inhale vapours; Use suitable respiratory protective device in case of insufficient ventilation

#### Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Date revised: 14.10.2025

Replaces Version: 1 / US

Print date: 14.10.2025

replacement must be followed.  
 Gloves should be replaced regularly and if there is any sign of damage to the glove material.  
 Hand protection must comply with EN 374.  
 Appropriate Material nitrile

**Eye protection**

Safety glasses

**Body protection**

Clothing as usual in the chemical industry.

**SECTION 9: Physical and chemical properties**

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

|   |                     |    |                   |
|---|---------------------|----|-------------------|
| <b>Form</b>   | liquid              |    |                   |
| <b>Colour</b>                                       | reddish transparent |    |                   |
| <b>Odour</b>  | characteristic      |    |                   |
| <b>Odour threshold</b>                              |                     |    |                   |
| Remarks   | not determined      |    |                   |
| <b>pH value</b>                                     |                     |    |                   |
| Remarks   | not determined      |    |                   |
| <b>Melting point</b>                                |                     |    |                   |
| Remarks   | not determined      |    |                   |
| <b>Freezing point</b>                               |                     |    |                   |
| Remarks   | not determined      |    |                   |
| <b>Initial boiling point and boiling range</b>      |                     |    |                   |
| Value   | > 100               |    | °C                |
| <b>Flash point</b>                                  |                     |    |                   |
| Value   | > 250               |    | °C                |
| Method  | closed cup          |    |                   |
| <b>Evaporation rate (ether = 1) :</b>               |                     |    |                   |
| Remarks   | not determined      |    |                   |
| <b>Flammability (solid, gas)</b>                    |                     |    |                   |
| not determined                                      |                     |    |                   |
| <b>Upper/lower flammability or explosive limits</b> |                     |    |                   |
| Remarks   | not determined      |    |                   |
| <b>Vapour pressure</b>                              |                     |    |                   |
| Remarks   | not determined      |    |                   |
| <b>Vapour density</b>                               |                     |    |                   |
| Remarks   | not determined      |    |                   |
| <b>Density</b>                                      |                     |    |                   |
| Value   | 1,12                |    | g/cm <sup>3</sup> |
| Temperature   | 20                  | °C |                   |
| <b>Solubility in water</b>                          |                     |    |                   |
| Remarks   | virtually insoluble |    |                   |
| <b>Solubility(ies)</b>                              |                     |    |                   |
| Remarks   | not determined      |    |                   |



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Replaces Version: 1 / US

Date revised: 14.10.2025

Print date: 14.10.2025

**Partition coefficient: n-octanol/water**

Remarks not determined

**Auto-ignition temperature**

Remarks not determined

**Decomposition temperature**

Remarks not determined

**Viscosity**

Remarks not determined

**Explosive properties**

evaluation not determined

**Oxidising properties**

Remarks not determined

**9.2. Other information**

**Other information**

None known

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No hazardous reactions when stored and handled according to prescribed instructions.

**10.2. Chemical stability**

No hazardous reactions known.

**10.3. Possibility of hazardous reactions**

No hazardous reactions known.

**10.4. Conditions to avoid**

Protect from heat and direct sunlight

**Decomposition temperature**

Remarks not determined

**10.5. Incompatible materials**

None known

**10.6. Hazardous decomposition products**

Irritant gases/vapours

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute oral toxicity**

Remarks Based on available data, the classification criteria are not met.

**Acute oral toxicity (Components)**

**2,2'-ethylenedioxydiethyl dimethacrylate**

|         |     |      |       |
|---------|-----|------|-------|
| Species | rat |      |       |
| LD50    | >   | 2000 | mg/kg |



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Date revised: 14.10.2025

Replaces Version: 1 / US

Print date: 14.10.2025

Method OECD 420

**7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate**

Species rat  
LD50 > 5000 mg/kg  
Method OECD 401

**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**

Species rat  
LD50 > 2000 mg/kg  
Method OECD 401

**Acute dermal toxicity**

Remarks Based on available data, the classification criteria are not met.

**Acute dermal toxicity (Components)**

**2,2'-ethylenedioxydiethyl dimethacrylate**

Species mouse  
LD50 > 2000 mg/kg

**7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate**

Species rat  
LD50 > 2000 mg/kg  
Method OECD 402

**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**

Species rat  
LD50 > 2000 mg/kg  
Method OECD 402

**Acute inhalational toxicity**

Remarks Based on available data, the classification criteria are not met.

**Skin corrosion/irritation**

Remarks Based on available data, the classification criteria are not met.

**Serious eye damage/irritation**

Remarks Based on available data, the classification criteria are not met.

**Sensitization**

evaluation May cause sensitization by skin contact.  
Remarks The classification criteria are met.

**Sensitization (Components)**

**2,2'-ethylenedioxydiethyl dimethacrylate**

Route of exposure dermal  
Species mouse  
evaluation sensitizing  
Method OECD 429

**7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate**

Route of exposure dermal  
Species mouse  
evaluation sensitizing

**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**

Route of exposure dermal  
Species guinea pig  
evaluation sensitizing  
Method OECD 406

**Subacute, subchronic, chronic toxicity**

Remarks not determined

**Mutagenicity**



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Date revised: 14.10.2025

Replaces Version: 1 / US

Print date: 14.10.2025

Remarks Based on available data, the classification criteria are not met.

**Reproductive toxicity**

Remarks Based on available data, the classification criteria are not met.

**Carcinogenicity**

Remarks Based on available data, the classification criteria are not met.

**National Toxicology Program (NTP)**

No component of this product present at levels greater than or equal to 0,1% is identified as a known or reasonably anticipated to be human carcinogen by NTP

**International Agency for research on Cancer (IARC)**

No component of this product present at levels greater than or equal to 0,1% is identified as probable, possible or confirmed human carcinogen by IARC

**Specific Target Organ Toxicity (STOT)**

**Single exposure**

Remarks Based on available data, the classification criteria are not met.

**Repeated exposure**

Remarks Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Experience in practice**

Inhalation may lead to irritation of the respiratory tract.

**Other information**

No toxicological data are available.

**SECTION 12: Ecological information**

**12.1. Toxicity**

**General information**

not determined

**Fish toxicity (Components)**

**2,2'-ethylenedioxydiethyl dimethacrylate**

|                      |                                |   |      |
|----------------------|--------------------------------|---|------|
| Species              | zebra fish (Brachydanio rerio) |   |      |
| LC50                 | 16,4                           |   | mg/l |
| Duration of exposure | 96                             | h |      |
| Method               | OECD 203                       |   |      |

**7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate**

|                      |                                |   |      |
|----------------------|--------------------------------|---|------|
| Species              | zebra fish (Brachydanio rerio) |   |      |
| LC50                 | 10,1                           |   | mg/l |
| Duration of exposure | 96                             | h |      |
| Method               | OECD 203                       |   |      |

**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**

|                      |                                |   |      |
|----------------------|--------------------------------|---|------|
| Species              | zebra fish (Brachydanio rerio) |   |      |
| LC50                 | > 90                           |   | µg/l |
| Duration of exposure | 96                             | h |      |
| Method               | OECD 203                       |   |      |

**Daphnia toxicity (Components)**

**2,2'-ethylenedioxydiethyl dimethacrylate**

|         |               |  |      |
|---------|---------------|--|------|
| Species | Daphnia magna |  |      |
| NOEC    | 32            |  | mg/l |



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Date revised: 14.10.2025

Replaces Version: 1 / US

Print date: 14.10.2025

Duration of exposure 21 d  
Method OECD 211

**7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate**

Species Daphnia magna  
EC50 1,2 mg/l  
Duration of exposure 48 h  
Method OECD 202

**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**

Species Daphnia magna  
EC50 > 1175 µg/l  
Duration of exposure 48 h  
Method OECD 202

**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**

Species Daphnia magna  
NOEC >= 8,1 µg/l  
Duration of exposure 21 d  
Method OECD 211

**Algae toxicity (Components)**

**2,2'-ethylenedioxydiethyl dimethacrylate**

Species Pseudokirchneriella subcapitata  
ErC50 > 100 mg/l  
Duration of exposure 72 h  
Method OECD 201

**7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate**

Species Scenedesmus subspicatus  
EC50 > 0,68 mg/l  
Duration of exposure 72 h  
Method OECD 201

**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**

Species Scenedesmus subspicatus  
EC50 > 260 µg/l  
Duration of exposure 72 h  
Method OECD 201

**Bacteria toxicity (Components)**

**7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate**

Species activated sludge  
NOEC >= 36,1 mg/l  
Duration of exposure 14 d

**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**

Species activated sludge  
EC50 > 100 mg/l  
Duration of exposure 3 h  
Method OECD 209

**12.2. Persistence and degradability**

**General information**

not determined

**Biodegradability (Components)**

**2,2'-ethylenedioxydiethyl dimethacrylate**

Value 85 %  
Duration of test 28 d  
evaluation Readily biodegradable (according to OECD criteria)



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Date revised: 14.10.2025

Replaces Version: 1 / US

Print date: 14.10.2025

Method OECD 301 B

**7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate**

Value 22 %

Duration of test 28 d  
evaluation not readily degradable

**Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide**

Value 1 %

Duration of test 28 d  
evaluation not degradable

### 12.3. Bioaccumulative potential

#### General information

not determined

#### Partition coefficient: n-octanol/water

Remarks not determined

#### Octanol/water partition coefficient (log Pow) (Components)

##### 2,2'-ethylenedioxydiethyl dimethacrylate

log Pow 2,3

Method OECD 117

##### 7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate

log Pow 3,39

Temperature 20 °C

##### Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

log Pow 5,8

### 12.4. Mobility in soil

#### General information

not determined

### 12.5. Results of PBT and vPvB assessment

#### General information

not determined

#### Evaluation of persistence and bioaccumulation potential

The product contains no PBT substances

The product contains no vPvB substances.

### 12.6. Other adverse effects

#### General information

not determined

#### General information / ecology

Do not allow to enter soil, waterways or waste water canal. Avoid release into the atmosphere.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations for the product

Must not be disposed together with household garbage.

Dispose of waste according to applicable legislation.

#### Disposal recommendations for packaging



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Replaces Version: 1 / US

Date revised: 14.10.2025

Print date: 14.10.2025

Packaging that cannot be cleaned should be disposed off as product waste.

## SECTION 14: Transport information \*\*\*

|   | Ground transport DOT<br>***  | Marine transport<br>IMDG/GGVSee   | Air transport ICAO/IATA   |
|---|--|---|---|
| <b>14.1. UN number</b>                  | The product does not constitute a hazardous substance in land transport. | 3082  | 3082  |
| <b>14.2. UN proper shipping name</b>    | -  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diylbismethacrylate, Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide) | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (7,7,9 (7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diylbismethacrylate, Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide) |
| <b>14.3. Transport hazard class(es)</b> |  | 9   | 9   |
| Label                                   |  |   |   |
| <b>14.4. Packing group</b>              |  | III   | III   |
| Remarks                                 |  | The product can be transported in accordance with IMDG Code paragraph 2.10.2.7, provided packaging not more than 5 l / 5 kg.  | The product is not subject to any other provisions of IATA provided packaging of not more than 5 l / 5 kg (A197)  |

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Other information

All components are contained in the TSCA inventory or exempted.

#### US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355)

The product does not contain any listed components.

#### US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

The product does not contain any listed components.

#### California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

Warning! This product may contain trace quantities of substance(s) known to the state of California to cause cancer and/or reproductive toxicity – not added as a part of the formulation but remaining as residuals from the manufacturing process of our raw material suppliers.



Trade name: FotoDent cast

Substance number: 9380

Version: 2 / US

Replaces Version: 1 / US

Date revised: 14.10.2025

Print date: 14.10.2025

## SECTION 16: Other information

### Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*  
This information is based on our present state of knowledge. However, it should not constitute a  
guarantee for any specific product properties and shall not establish a legally valid relationship.