

according to 29 CFR 1910.1200(g)

# freeprint® ortho 385

Revision date: 12/17/2020

Product code: 839

Page 1 of 8

#### 1. Identification

#### Product identifier

freeprint® ortho 385

#### Recommended use of the chemical and restrictions on use

#### Use of the substance/mixture

Light curing one component material for the fabrication of dental splints and guides.

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

Details of the supplier of the sale			
Company name:	DETAX GmbH		
Street:	Carl-Zeiss-Straße 4		
Place:	D-76275 Ettlingen		
Telephone:	+49 7243/510-0	Telefax: +49 7243/510-100	
e-mail:	post@detax.com		
Internet:	www.detax.com		
Responsible Department:	This number is only obtainable during office hours		
	(Monday - Thursday 8.00 a.m 5.00 p.m., Friday 8.00 a.m 4.00 p.m.)		
Emergency phone number:	+1-800-424-9300 (CHEMTREC v	vorldwide)	

#### 2. Hazard(s) identification

#### **Classification of the chemical**

#### 29 CFR Part 1910.1200

Skin corrosion/irritation: Skin Irrit. 2 Serious eye damage/eye irritation: Eye Irrit. 2 Respiratory or skin sensitization: Skin Sens. 1 Specific target organ toxicity single exposure: STOT SE 3 (respiratory tract irritation) Hazardous to the aquatic environment: Aquatic Chronic 3

#### Label elements

#### 29 CFR Part 1910.1200

Signal word:

Warning

**Pictograms:** 



#### Hazard statements

Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction May cause respiratory irritation Harmful to aquatic life with long lasting effects

#### **Precautionary statements**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. If on skin: Wash with plenty of water. Wash contaminated clothing before reuse. If exposed or concerned: Get medical advice/attention. Store locked up.



according to 29 CFR 1910.1200(g)

### freeprint® ortho 385

Revision date: 12/17/2020

Product code: 839

Page 2 of 8

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

Hazards not otherwise classified

No information available.

# 3. Composition/information on ingredients

#### **Mixtures**

#### Chemical characterization

Mixture of acrylic/ methacrylic resins with auxilliary matters.

#### Hazardous components

CAS No	Components	Quantity
72869-86-4	7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	40 - < 60 %
41637-38-1	isopropylidenediphenol peg dimethacrylate	20 - < 40 %
72829-09-5	1,12-Dodecanediol Dimethacrylate	5 - < 20 %
27813-02-1	Hydroxy propyl methacrylate	0,1 - < 5 %
2455-24-5	tetrahydrofurfuryl methacrylate THFMA purified grade	0,1 - < 5 %
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	0,1 - < 5 %
868-77-9	2-hydroxyethyl methacrylate	0,1- < 5 %

#### 4. First-aid measures

#### **Description of first aid measures**

#### After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

#### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

#### After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

#### After ingestion

Rinse mouth immediately and drink plenty of water.

Seek immediately medical advice. Do not induce vomiting. In case of spontaneous vomiting take care of an unhindered flow out of the vomit (danger of suffocation).

#### Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### 5. Fire-fighting measures

# Extinguishing media

#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

#### Specific hazards arising from the chemical

Non-flammable.

#### Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

# according to 29 CFR 1910.1200(g)

## freeprint® ortho 385

Revision date: 12/17/2020

Product code: 839

Page 3 of 8

#### Additional information

Supress gases/vapors/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

#### **General advice**

Provide adequate ventilation. Do not breathe gas/fume/vapor/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

#### **Environmental precautions**

Do not allow to enter into surface water or drains.

#### Methods and material for containment and cleaning up

#### Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### Reference to other sections

Safe handling: see section 7 Personal protection equipment (PPE): see section 8 Disposal: see section 13

#### 7. Handling and storage

# Precautions for safe handling

#### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapor/spray.

#### Advice on protection against fire and explosion

No special fire protection measures are necessary.

#### Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

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

#### Requirements for storage rooms and vessels

Keep container tightly closed.

#### Hints on joint storage

Keep away from spontaneous flammable or combustible substances.

#### Further information on storage conditions

Keep only in the original container in a dry and well-ventilated place, away from foodstuffs. Keep away from all kind of ligth. An inert gas blanket should not be applied, because the stability of the product depends on the presence of oxygen (air).

#### 8. Exposure controls/personal protection

#### Control parameters

#### Exposure controls

#### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapor/spray.

#### Individual protection measures, such as personal protective equipment



according to 29 CFR 1910.1200(g)

# freeprint® ortho 385

Revision date: 12/17/2020

Product code: 839

Page 4 of 8

#### Eye/face protection

Suitable eye protection: goggles.

#### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable are gloves of the following material: Butyl caoutchouc (butyl rubber)

#### Skin protection

Wear suitable protective clothing.

## **Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

#### 9. Physical and chemical properties

# Information on basic physical and chemical properties

Information on basic physical and chemical	l properties	
Physical state:	liquid:	
Color:	clear	
Odor:	faintly like esters	
		Test method
Melting point/freezing point:	not determined	
Boiling point or initial boiling point and	not determined	
boiling range:		
Flammability		
Solid/liquid:	not applicable	
Gas:	not applicable	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Flash point:		DIN 51755
Decomposition temperature:	>=190 °C	
pH-Value:	not determined	
Water solubility:	The study does not need to be conducted	
	because the substance is known to be	
	insoluble in water.	
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:	not determined	
Vapor pressure:	<1 hPa	
(at 20 °C)		
Density (at 20 °C):		DIN 51757
Relative vapour density:	not determined	
Other information		
Information with regard to physical haza	rd classes	
Self-ignition temperature		
Solid:	not applicable	
Gas:	not applicable	
Oxidizing properties		
Not oxidizing.		
Other safety characteristics		
Evaporation rate:	not determined	
Solid content:	not determined	

# according to 29 CFR 1910.1200(g)

# freeprint® ortho 385

Revision date: 12/17/2020

Product code: 839

Page 5 of 8

#### 10. Stability and reactivity

#### **Reactivity**

No hazardous reaction when handled and stored according to provisions.

# Chemical stability

The product is stable under storage at normal ambient temperatures.

#### Possibility of hazardous reactions

Reacts with : strong oxidising agents, strong alcaline or acidic materials.

# Conditions to avoid

Ultra-violet ligth and dayligth initiate polymerisation of the product. Therefore keep only in tigthly closed containers away from any sources of ligth at 15°C - 28°C / 59°F - 82 °F.

#### Incompatible materials

No information available.

#### Hazardous decomposition products

No known hazardous decomposition products.

#### **11. Toxicological information**

#### Information on toxicological effects

#### Acute toxicity

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

## ATEmix calculated

ATE (oral) 4965,9 mg/kg; ATE (dermal) 3188,3 mg/kg

# according to 29 CFR 1910.1200(g)

# freeprint® ortho 385

Revision date: 12/17/2020

Product code: 839

Page 6 of 8

CAS No	Components						
	Exposure route	Dose		Species	Source	Method	
72869-86-4	-4 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate						
	oral	LD50 mg/kg	>5000	Rat	OECD 401		
	dermal	LD50 mg/kg	>2000	Rat	OECD 402		
41637-38-1	isopropylidenedipher	nol peg dimetha	icrylate				
	oral	LD50 mg/kg	>2000	Rat			
	dermal	LD50 mg/kg	>2000	Rat			
72829-09-5	1,12-Dodecanediol	1,12-Dodecanediol Dimethacrylate					
	oral	LD50 mg/kg	>2000	Rat			
27813-02-1	Hydroxy propyl meth	Hydroxy propyl methacrylate					
	oral	LD50 mg/kg	>2000	Rat	OECD 401		
	dermal	LD50 mg/kg	>5000	Rabbit			
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide						
	oral	LD50 mg/kg	>5000	Rat			
	dermal	LD50 mg/kg	>2000	Rat			
868-77-9	2-hydroxyethyl methacrylate						
	oral	LD50 mg/kg	5564	Rat			
	dermal	LD50 mg/kg	>5000	Rabbit			

#### Irritation and corrosivity

Causes skin irritation Causes serious eye irritation

# Sensitizing effects

May cause an allergic skin reaction (7,7,9(or 7,9,9) -trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate; 1,12-Dodecanediol Dimethacrylate; Hydroxy propyl methacrylate; tetrahydrofurfuryl methacrylate THFMA purified grade; diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide; 2-hydroxyethyl methacrylate)

#### Carcinogenic/mutagenic/toxic effects for reproduction

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

#### Specific target organ toxicity (STOT) - single exposure

May cause respiratory irritation

#### Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met.Carcinogenicity (OSHA):No ingredient of this mixture is listed.Carcinogenicity (IARC):No ingredient of this mixture is listed.Carcinogenicity (NTP):No ingredient of this mixture is listed.

#### Aspiration hazard

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



according to 29 CFR 1910.1200(g)

# freeprint® ortho 385

Revision date: 12/17/2020

Product code: 839

Page 7 of 8

## Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

#### 12. Ecological information

#### Ecotoxicity

The product is not: Ecotoxic.

#### Persistence and degradability

The product has not been tested.

#### **Bioaccumulative potential**

The product has not been tested.

#### Mobility in soil

The product has not been tested.

#### Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### Other adverse effects

No information available.

#### **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

#### 13. Disposal considerations

#### Waste treatment methods

#### Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

#### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

#### 14. Transport information

#### Marine transport (IMDG)

UN number or ID number: No dangerous good in sense of this transport regulation. UN proper shipping name: No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. Transport hazard class(es): Packing group: No dangerous good in sense of this transport regulation. Air transport (ICAO-TI/IATA-DGR) UN number or ID number: No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. UN proper shipping name: Transport hazard class(es): No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. Packing group:

#### Special precautions for user

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No dangerous good in sense of this transport regulation.

#### 15. Regulatory information

#### U.S. Regulations

#### National regulatory information

# **DETAX**

# Safety Data Sheet

according to 29 CFR 1910.1200(g)

# freeprint® ortho 385

Revision date: 12/17/2020

Product code: 839

Page 8 of 8

SARA Section 311/312 Hazards:

7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate (72869-86-

4): Immediate (acute) health hazard

1,12-Dodecanediol Dimethacrylate (72829-09-5): Immediate (acute) health hazard

Hydroxy propyl methacrylate (27813-02-1): Immediate (acute) health hazard

tetrahydrofurfuryl methacrylate THFMA purified grade (2455-24-5): Immediate (acute) health hazard

diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (75980-60-8): Immediate (acute) health hazard

2-hydroxyethyl methacrylate (868-77-9): Immediate (acute) health hazard

## State Regulations

#### Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other informatio	n
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Revision date:	17.12.2020	
Revision No:	1,08	
Abbreviations and acronyms		
ADR: Accord européen sur	le transport des marchandises dangereuses pa	ar Route
(European Agreement conc	erning the International Carriage of Dangerous	Goods by Road)
IMDG: International Maritim	e Code for Dangerous Goods	
IATA: International Air Tran	sport Association	

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

#### Other data

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)