

Safety Data Sheet

according to 29 CFR 1910.1200(g)

freeprint® temp 385

Revision date: 12/17/2020

Product code: 919

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1. Identification

Product identifier

freeprint® temp 385

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Light-curing single-component material for the generative production of dental restorations such as temporary crowns and bridges.

Details of the supplier of the safety data sheet

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 worldwide)

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

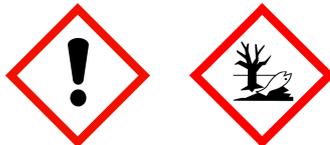
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitization: Skin Sens. 1
Specific target organ toxicity single exposure: STOT SE 3 (respiratory tract irritation)
Hazardous to the aquatic environment: Aquatic Chronic 2

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
Toxic 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.

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Store locked up.

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
41637-38-1	isopropylidenediphenol peg dimethacrylate	10 - < 60 %
72869-86-4	7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	20 - < 40 %
6606-59-3	1,6-hexanediol dimethacrylate	0,1 - < 5 %
868-77-9	2-hydroxyethyl methacrylate	0,1 - < 5 %
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	0,1 - < 5 %
27813-02-1	Hydroxy propyl methacrylate	0,1 - < 5 %
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	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.

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Additional information

Suppress 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 light. 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

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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

Physical state:	liquid:
Color:	tooth-like
Odor:	faintly like esters

Test method

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability	
Solid/liquid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	>100 °C 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):	1,1 g/cm ³ DIN 51757
Relative vapour density:	not determined

Other information

Information with regard to physical hazard classes

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable

Oxidizing properties

Not oxidizing.

Other safety characteristics

Evaporation rate:	not determined
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Solid content:	not determined
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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 alkaline or acidic materials.

Conditions to avoid

Ultra-violet light and daylight initiate polymerisation of the product. Therefore keep only in tightly closed containers away from any sources of light 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) 4963,9 mg/kg; ATE (dermal) 2929,0 mg/kg

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	Exposure route	Dose	Species	Source	Method
41637-38-1	isopropylidenediphenol peg dimethacrylate				
	oral	LD50 >2000 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
72869-86-4	7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate				
	oral	LD50 >5000 mg/kg	Rat	OECD 401	
	dermal	LD50 >2000 mg/kg	Rat	OECD 402	
868-77-9	2-hydroxyethyl methacrylate				
	oral	LD50 5564 mg/kg	Rat		
	dermal	LD50 >5000 mg/kg	Rabbit		
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide				
	oral	LD50 >5000 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Rat		
27813-02-1	Hydroxy propyl methacrylate				
	oral	LD50 >2000 mg/kg	Rat	OECD 401	
	dermal	LD50 >5000 mg/kg	Rabbit		
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide				
	oral	LD50 >2000 mg/kg	Rat	OECD 401	
	dermal	LD50 >2000 mg/kg	Rat	OECD 402	

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; 2-hydroxyethyl methacrylate; diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide; Hydroxy propyl methacrylate; phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide)

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.

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Aspiration hazard

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

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.

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CAS No	Components					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
41637-38-1	isopropylidenediphenol peg dimethacrylate					
	Acute fish toxicity	LC50 >100 mg/l	96 h			
	Acute crustacea toxicity	EC50 >100 mg/l	48 h			
72869-86-4	7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate					
	Acute fish toxicity	LC50 10,1 mg/l	96 h			OECD 203
	Acute algae toxicity	ErC50 0,21 mg/l	72 h			OECD 201
	Acute crustacea toxicity	EC50 >1,2 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
868-77-9	2-hydroxyethyl methacrylate					
	Acute fish toxicity	LC50 >100 mg/l	96 h	Oryzias latipes		OECD 203
	Acute algae toxicity	ErC50 836 mg/l	72 h	Selenastrum capricornutum		OECD 201
	Acute crustacea toxicity	EC50 380 mg/l	48 h	Daphnia magna		OECD 202
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide					
	Acute algae toxicity	ErC50 >2,01 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50 3,53 mg/l	48 h	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	(EC50 >1000 mg/l)	3 h	Activated sludge		
27813-02-1	Hydroxy propyl methacrylate					
	Acute fish toxicity	LC50 493 mg/l	96 h	Leuciscus idus (golden orfe)		
	Acute algae toxicity	ErC50 >97,2 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 201	
	Acute crustacea toxicity	EC50 380 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide					
	Acute fish toxicity	LC50 >0,09 mg/l	96 h	Danio rerio (zebrafish)	OECD 203	
	Acute algae toxicity	ErC50 >0,26 mg/l	72 h	Desmodesmus subspicatus	OECD 201	
	Acute crustacea toxicity	EC50 >1,175 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
	Crustacea toxicity	NOEC >0,008 mg/l	21 d	Daphnia magna (Big water flea)	OECD 211	
	Acute bacteria toxicity	(EC50 >100 mg/l)	3 h	OECD 209		

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

The product has not been tested.

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Partition coefficient n-octanol/water

CAS No	Components	Log Pow
72869-86-4	7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	3,39
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	3,1
27813-02-1	Hydroxy propyl methacrylate	0,97
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	5,8

BCF

CAS No	Components	BCF	Species	Source
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	47-55	Cyprinus carpio (Common Carp)	
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	<5	Cyprinus carpio (Common Carp)	OECD 305

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:

UN 3082

UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Contains: 7,7,9(or 7,9,9)

-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diylbismethacrylate

Transport hazard class(es):

9

Packing group:

III

Hazard label:

9

Marine pollutant:

YES

Special Provisions:

274, 335, 969

Limited quantity:

5 L/ 30 kg

Excepted quantity:

E1

EmS:

F-A, S-F

Other applicable information (marine transport)

Flash point: > 100°C

Air transport (ICAO-TI/IATA-DGR)

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UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Contains: 7,7,9(or 7,9,9) -trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahehexadecane-1,16-diylbismethacrylate
Transport hazard class(es):	9
Packing group:	III
Hazard label:	9
Special Provisions:	A97 A158 A197
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y964
Excepted quantity:	E1
IATA-packing instructions - Passenger:	964
IATA-max. quantity - Passenger:	450 L
IATA-packing instructions - Cargo:	964
IATA-max. quantity - Cargo:	450 L

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

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

SARA Section 311/312 Hazards:

- 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahehexadecane-1,16-diyl bismethacrylate (72869-86-4): Immediate (acute) health hazard
- 1,6-hexanediol dimethacrylate (6606-59-3): Immediate (acute) health hazard
- 2-hydroxyethyl methacrylate (868-77-9): Immediate (acute) health hazard
- diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (75980-60-8): Immediate (acute) health hazard
- Hydroxy propyl methacrylate (27813-02-1): Immediate (acute) health hazard
- phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide (162881-26-7): 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 information

Revision date: 17.12.2020
Revision No: 1,03

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
- 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

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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.)