

according to Regulation (EC) No 1907/2006

freeprint® denture impact

Revision date: 25.06.2024 Product code: 2215 Page 1 of 12

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

1.1. Product identifier

freeprint® denture impact

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

Use of the substance/mixture

Light-curing resin for the generative fabrication of removable dental prosthesis bases.

1.3. 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.)

1.4. Emergency telephone +1-800-424-9300 (CHEMTREC worldwide)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate

phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide

Signal word: Warning

Pictograms:





Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P501 Dispose of contents/ container in accordance with local and national regulations.

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

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.



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P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P391 Collect spillage.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification (Regulation (EC) No					
41637-38-1	Ethoxylated bisphenol A dimethacr	ylate		40 - < 60 %		
	Aquatic Chronic 4; H413					
72869-86-4	7,7,9(or 7,9,9)-trimethyl-4,13-dioxo	-3,14-dioxa-5,12-diazahexadecane-1	I,16-diyl bismethacrylate	20 - < 40 %		
	276-957-5		01-2120751202-68			
	Skin Sens. 1B, Aquatic Chronic 2;	H317 H411				
7534-94-3	-94-3 Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate					
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3	rit. 2, STOT SE 3, Aquatic Chronic 3; H315 H319 H335 H412				
84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoy		0.1 - < 5 %			
	282-810-6		01-2119987994-10			
	Skin Sens. 1B, Aquatic Chronic 2;					
68909-20-6	silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)- hydrolysis products with silicon dioxide					
	272-697-1					
	STOT RE 2; H373	•				
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-		0.1 - < 5 %			
	423-340-5	015-189-00-5	01-2119489401-38			
	Skin Sens. 1A, Aquatic Chronic 4; H317 H413					
	·	·	·			

Full text of H and EUH statements: see section 16.



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Specific Conc. Limits, M-factors and ATE

CAS No	EC No Chemical name					
	Specific Conc.	Limits, M-factors and ATE				
41637-38-1		Ethoxylated bisphenol A dimethacrylate	40 - < 60 %			
	dermal: LD50	= 2000 mg/kg; oral: LD50 = 2000 mg/kg				
72869-86-4	276-957-5	7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	20 - < 40 %			
	dermal: LD50 = >2000 mg/kg; oral: LD50 = >5000 mg/kg					
7534-94-3		Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	5 - < 20 %			
	dermal: LD50 = >3000 mg/kg; oral: LD50 = >2000 mg/kg					
84434-11-7	282-810-6	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	0.1 - < 5 %			
	dermal: LD50 = >2000 mg/kg; oral: LD50 = >5000 mg/kg					
162881-26-7	423-340-5	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	0.1 - < 5 %			
	dermal: LD50	= >2000 mg/kg; oral: LD50 = >2000 mg/kg				

SECTION 4: First aid measures

4.1. 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 plenty of water and soap. 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 1 glass of of water.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

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

Additional information

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

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





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6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For cleaning up

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.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special measures are necessary.

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, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Light-curing resin for the generative fabrication of removable dental prosthesis bases.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Individual protection measures, such as personal protective equipment

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.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid:

Colour:

Melting point/freezing point:

Boiling point or initial boiling point and

258 °C

boiling range:

not determined Flammability: Lower explosion limits: not determined Upper explosion limits: not determined >100 °C Flash point: 385 °C Auto-ignition temperature: Decomposition temperature: not determined pH-Value: not determined Viscosity / kinematic: not determined The study does not need to be conducted Water solubility: because the substance is known to be insoluble in water.

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined Vapour pressure: 0,075 hPa

(at 20 °C)

Density: not determined Relative vapour density: not determined Particle characteristics: not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information



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11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name								
	Exposure route	Dose		Species	Source	Method			
41637-38-1	Ethoxylated bisphenol A dimethacrylate								
	oral	LD50 mg/kg	2000	Rat	OECD 423				
	dermal	LD50 mg/kg	2000	Rat	OECD 402				
72869-86-4	7,7,9(or 7,9,9)-trimet	hyl-4,13-dioxo-	-3,14-dioxa-5	,12-diazahexadeca	ane-1,16-diyl bismethacrylate				
	oral	LD50 mg/kg	>5000	Rat	OECD 401				
	dermal	LD50 mg/kg	>2000	Rat	OECD 402				
7534-94-3	Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate								
	oral	LD50 mg/kg	>2000	Rat	MSDS				
	dermal	LD50 mg/kg	>3000	Rabbit	MSDS				
34434-11-7	Ethyl phenyl(2,4,6-tri	methylbenzoyl)phosphinate	1					
	oral	LD50 mg/kg	>5000	Rat		OECD 401			
	dermal	LD50 mg/kg	>2000	Rat					
162881-26-7	phenyl bis(2,4,6-trime	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide							
	oral	LD50 mg/kg	>2000	Rat	OECD 401				
	dermal	LD50 mg/kg	>2000	Rat	OECD 402				

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising 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; Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate; phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide)

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards



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Other information

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

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

CAS No	No Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
41637-38-1	Ethoxylated bisphenol A dimethacrylate							
	Acute fish toxicity	LC50 mg/l	>100	96 h	Oncorhynchus mykiss (Rainbow trout)	OECD 203		
	Acute algae toxicity	ErC50 mg/l	>100	72 h	Pseudokirchneriella subcapitata	OECD 201		
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Daphnia magna (Big water flea)	OECD 202		
72869-86-4	7,7,9(or 7,9,9)-trimethyl-4	,13-dioxo-3,	14-dioxa-5,1	2-diazah	exadecane-1,16-diyl bisn	nethacrylate		
	Acute fish toxicity	LC50 mg/l	10,1	96 h			OECD 203	
	Acute algae toxicity	ErC50 mg/l	0,21	72 h			OECD 201	
	Acute crustacea toxicity	EC50 mg/l	>1,2	48 h	Daphnia magna (Big water flea)	OECD 202		
7534-94-3 Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate								
	Acute fish toxicity	LC50 mg/l	1,79	96 h		MSDS	OECD 203	
	Acute crustacea toxicity	EC50 mg/l	>2,57	48 h	Daphnia magna	MSDS	OECD 202	
84434-11-7	Ethyl phenyl(2,4,6-trimeth	ylbenzoyl)p	hosphinate					
	Acute fish toxicity	LC50 mg/l	1,89	96 h	Danio rerio			
162881-26-7	phenyl bis(2,4,6-trimethyll	penzoyl)-ph	osphine oxid	е				
	Acute fish toxicity	LC50 mg/l	>0,09	96 h	Danio rerio (zebrafish)	OECD 203		
	Acute algae toxicity	ErC50 mg/l	>0,26	72 h	Desmodesmus subspicatus	OECD 201		
	Acute crustacea toxicity	EC50 mg/l	>1,175	48 h	Daphnia magna (Big water flea)	OECD 202		
	Crustacea toxicity	NOEC mg/l	>0,008	21 d	Daphnia magna (Big water flea)	OECD 211		
	Acute bacteria toxicity	(EC50 mg/l)	>100	3 h	OECD 209			

12.2. Persistence and degradability

The product has not been tested.



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CAS No	Chemical name						
	Method	Value	d	Source			
	Evaluation						
41637-38-1	Ethoxylated bisphenol A dimethacrylate						
	OECD 301D/ EEC 92/69/V, C.4-E 24% 28						
	Not readily biodegradable (according to OECD criteria)						
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide						
	CO2 formation (% of the theoretical value). 1% 29						
	Not readily biodegradable (according to OECD criteria)						

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
	7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	3,39
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	5,8

BCF

CAS No	Chemical name	BCF	Species	Source
162881-26-7	phenyl bis(2,4,6-trimethylbenzoyl) -phosphine oxide		Cyprinus carpio (Common Carp)	OECD 305

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

The product has not been tested.

12.6. 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.

12.7. 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.

SECTION 13: Disposal considerations

13.1. 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.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es):



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14.4. Packing group:IIIHazard label:9Classification code:M6

Special Provisions: 274 335 375 601

Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 90
Tunnel restriction code: -

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es):914.4. Packing group:IIIHazard label:9Classification code:M6

Special Provisions: 274 335 375 601

Limited quantity: 5 L
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es):914.4. Packing group:IIIHazard label:9

Special Provisions: 274 335 969

Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es):914.4. Packing group:IIIHazard label:9

Special Provisions: A97 A158 A197 A215

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

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information





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Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Information according to 2012/18/EU

(SEVESO III):

E2 Hazardous to the Aquatic Environment

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information



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Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety

assessment, chapter R.20 (Table of terms and abbreviations).

Skin Irrit: Skin irritation Eye Irrit: Eye irritation Skin Sens: Skin sensitisation

STOT SE: Specific target organ toxicity - single exposure STOT RE: Specific target organ toxicity - repeated exposure

Aquatic Chronic: Chronic aquatic hazard

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Olassification for mixtures a	ind discust valuation method decorating to Regulation (20) No 12/2/2000 [OZI]
Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

Causas akin irritation

нэтэ	Causes skin imitation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposu



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H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.
 H413 May cause long lasting harmful effects to aquatic life.

Further Information

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.

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Gewerblich	-	-	-	-	-	-	-	2

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

SU: Sectors of use

PROC: Process categories

AC: Article categories

TF: Technical functions

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