

Safety Data Sheet

according to regulation (EU) No. 1907/2006

Printing date: 11/04/2021

pico-splint star

Page 1 of 10

1. Identification of the substance/mixture and of the company/undertaking *

1.1. Information on the product

Trade name:

pico-splint star

UFI:

XMDW-M0DV-M008-QERY

1.2. Relevant identified uses of the substance/mixture and uses that are inadvisable

Use of the substance/mixture

Light curing one-component material for manufacturing of individual moulded parts

1.3. Details about the supplier of the safety data sheet

Manufacturer/Supplier:

Company name:

DETAX GmbH & Co. KG

Street:

Carl-Zeiss-Strasse

City:

D-76275 Ettlingen

Telephone:

+49 7243 510-0

Telefax: +49 7243 510-100

E-Mail:

post@detax.de

Internet:

www.detax.de

Responsible Department:

Emergency number: +49 7243 510-0

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.)

Distribution:

picodent GmbH
Lüdenscheider Str. 24-26
D-51688 Wipperfürth

Telephone: +49 2267 6580-0
Mo.-Fr. 7.30 - 16.45 Uhr
picodent@picodent.de

1.4. Emergency contact number:

Telephone +49 7243/510-0

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.)

2. Hazards identification *

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Respiratory or skin sensitisation:

Skin Sens. 1

Hazardous to the aquatic environment:

Aquatic Chronic 2

Hazard Statements:

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

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-dioxo-5,
12-diazahexadecane-1,16-diyl bismethacrylate
Tricyclodecane dimethanol diacrylate
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

Safety Data Sheet

according to regulation (EU) No. 1907/2006

Printing date: 11/04/2021

pico-splint star

Page 2 of 10

Signal word:

Warning

Pictograms:



Hazard statements

- H317 May cause an allergic skin reaction.
H411 Harmful to aquatic life with long lasting effects.

Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P501 Dispose of contents/ container in accordance with legal and national regulations.

2.3. Other hazards

No information available.

3. Composition/information on ingredients *

3.2. Mixtures

Chemical characterization

Mixture of acrylic/ methacrylic resins with auxilliary matters.

Hazardous components

CAS No	Chemical name	Index No	REACH No	Quantity
	EC No			
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
72869-86-4	7,7,9 (or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazahexadecane-1,16-diyl bismethacrylate			60 - < 65 %
	255-901-3		01-2120051112-76	
	Skin Sens. 1B, Aquatic Chronic 2; H317 H411			
42594-17-2	Tricyclodecane dimethanol diacrylate			10 - < 15 %
	255-901-3		01-2120051112-76	
	Skin Sens. 1B, Aquatic Chronic 2; H317 H411			
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			< 1 %
	278-355-8	015-203-00-X		
	Repr. 2, Skin Sens. 1B, Aquatic Chronic 2; H361f H317 H411			

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

4. First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

Safety Data Sheet

according to regulation (EU) No. 1907/2006

Printing date: 11/04/2021

pico-splint star

Page 3 of 10

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

Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.

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).

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.

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.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically. 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

Safety Data Sheet

according to regulation (EU) No. 1907/2006

Printing date: 11/04/2021

pico-splint star

Page 4 of 10

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.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Hints on joint storage

Further information on storage conditions

Keep container tightly closed.

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

7.3. Specific end use(s)

Lighth curing material for manufacturing of dental moulded parts; for use by trained special staff.

8. Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Protective and hygiene measures

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.

Eye/face protection

Wear eye/face protection.

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.

Safety Data Sheet

according to regulation (EU) No. 1907/2006

Printing date: 11/04/2021

pico-splint star

Page 5 of 10

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	several shades, according to the product name
Odour:	faintly like esters

Test method

pH-Value:	not determined	
Changes in the physical state		
Melting point:	not determined	
Initial boiling point and boiling range:	not determined	
Flash point:	>100 °C	DIN 51755
Flammability		
Solid:	not determined	
Gas:	not applicable	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Auto-ignition temperature		
Solid:	not determined	
Gas:	not applicable	
Decomposition temperature:	>190 °C	
Oxidizing properties		
Not oxidizing.		
Vapour pressure: (at 20 °C)	<1 hPa	
Density (at 20 °C):	1,09 g/cm ³	DIN 51757
Water solubility:	practically insoluble	
Solubility in other solvents		
not determined		
Partition coefficient:	not determined	
Vapour density:	not determined	
Evaporation rate:	not determined	

9.2. Other information

Solid content:	not determined
----------------	----------------

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	Reacts with : strong oxidising agents, strong alkaline or acidic materials.
10.4. Conditions to avoid	oxidising agents, radicals forming substances or heavy metal ions. 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.
10.5. Incompatible materials	No information available.
10.6. Hazardous decomposition products	In case of fire, acrid acrylic fumes may occur.

Safety Data Sheet

according to regulation (EU) No. 1907/2006

Printing date: 11/04/2021

pico-splint star

Page 6 of 10

11. Toxicological information *

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.
For the product itself no toxicological data are available. In products with a comparable composition, a LD50 (orally, species rat) of > 5000 mg/kg has been found.

CAS No	Chemical name	Exposure route	Dose	Species	Source
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	Ratte	OECD 401
		dermal	LD50 >5000 mg/kg	Ratte	OECD 402
42594-17-2	Tricyclodecane dimethanol diacrylate	oral	LD50 >2000 mg/kg	Rat	OECD 423
		dermal	LD50 >2000 mg/kg	Rat	OECD 402
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	oral	LD50 >5000 mg/kg	Rat	
		dermal	LD50 >2000 mg/kg	Rat	

Irritation and corrosivity

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

Sensitising effects

May cause an allergic skin reaction. 7,7,9 (oder 7,9,9)-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecan-1,16-diylbismethacrylat (Tricyclodecane dimethanol diacrylate); diphenyl(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.

Additional information on tests

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

12. Ecological information *

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name	Aquatic toxicity	Dose	[h] [d]	Species	Source
72869-86-4	7,7,9 (or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	Akute Crustaceatoxizität	EC50 >1,2 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202
42594-17-2	Tricyclodecane dimethanol diacrylate	Acute fish toxicity	LC50 1,65 mg/l	96 h	Brachydanio rerio (zebra-fish)	OECD 203
		Acute algae toxicity	ErC50 1,6 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 201
		Acute crustacea toxicity	EC50 2,36 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202

Safety Data Sheet

according to regulation (EU) No. 1907/2006

Printing date: 11/04/2021

pico-splint star

Page 7 of 10

CAS No	Chemical name	Dose	[h] [d]	Species	Source
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide				
	Acute algae toxicity	ErC50 >2,01 mg/l	72 h	Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50 3,53 mg/l	48 h	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	(>1000 mg/l)	3 h	Activated sludge	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name	Value	d	Source
	Method Evaluation			
42594-17-2	Tricyclodecane dimethanol diacrylate			
	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	28%	28	
	Not readily biodegradable (according to OECD criteria)			
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide			
	Not readily biodegradable (according to OECD criteria)	0-10%	28	

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
42594-17-2	Tricyclodecane dimethanol diacrylate	4,64
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	3,1

BCF

CAS No	Chemical name	BCF	Species	Source
75980-60-8	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	47-55	Cyprinus carpio (Common Carp)	

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

Not identified as PBT/ vPvB substances

12.6. 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 *

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.

Safety Data Sheet

according to regulation (EU) No. 1907/2006

Printing date: 11/04/2021

pico-splint star

Page 8 of 10

14. Transport information *

Land transport (ADR/RID)

14.1. UN number:	UN 3082
14.2. 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-diyl bismethacrylate
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274, 335, 375, 601
Limited quantity:	5 L/ 30kg
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-

Other applicable information (land transport)

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

Marine transport (IMDG)

14.1. UN number:	UN 3082
14.2. 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-diyl bismethacrylate
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Marine pollutant:	YES
Special Provisions:	274, 335, 969
Limited quantity:	5L/ 30kg
Excepted quantity:	E1
EmS:	F-A, S-F

Other applicable information (marine transport)

Contains: 7,7,9 (or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate
Flash point: >100°C

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 3082
14.2. 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-diyl bismethacrylate
14.3. Transport hazard class(es):	9
14.4. 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

Safety Data Sheet

according to regulation (EU) No. 1907/2006

Printing date: 11/04/2021

pico-splint star

Page 9 of 10

Other applicable information (air transport)

Contains: 7,7,9 (or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxo-5,12-diazaheptadecane-1,16-diyl bismethacrylate

14.5. Environmental hazards:

ENVIRONMENTALLY HAZARDOUS

Yes

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

15. Regulatory information *

15.1. Safety, health and environmental regulations/legislation

specific for the substance or mixture

National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D):

3 - strongly 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.

16. Other information *

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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

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

Classification Classification procedure

Skin Sens. 1; H317 Calculation method

Aquatic Chronic 2; H411 Calculation method

Relevant H and EUH statements (number and full text)

H317 May cause an allergic skin reaction.

H361f Suspected of damaging fertility.

H411 Toxic to aquatic life with long lasting effects.

Safety Data Sheet

according to regulation (EU) No. 1907/2006

Printing date: 11/04/2021

pico-splint star

Page 10 of 10

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Identified uses

Nr.	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Spezifikation
1	commercial	-	-	-	-	-	-	-	2

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories

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

* Data compared to the previous version Rev.-No. 3.03 altered.