



according to Regulation (EC) No 1907/2006

**RS VIVO Try-In** 

Revision date: 11.03.2025 Product code: RS006199 Page 1 of 11

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

#### 1.1. Product identifier

RS VIVO Try-In

UFI: 3K80-S0ST-500R-YW7H

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

#### Use of the substance/mixture

Light curing resin for additive manufacturing of dental aesthetic try-ins

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

Manufacturer

Company name: DeltaMed GmbH
Street: Raiffeisenstraße 8a
Place: 61169 Friedberg (GER)

Telephone: +49 6031 7283-0 Telefax: +49 6031 7283-29

E-mail: info@deltamed.de

Contact person: Research and Development

Department

E-mail: info@deltamed.de Internet: www.deltamed.de

Responsible Department: F&E

Telefax +49 6031 7283-29

**Supplier** 

Company name: Rapid Shape GmbH Street: Römerstrasse 21 Place: 71296 Heimsheim

Telephone: +49 (0) 7033/309878-0 Telefax: +49 (0) 7033/309878-40

E-mail (Contact person): info@rapidshape.de Internet: http://rapidshape.de

<u>1.4. Emergency telephone</u> Giftinformationszentrum Universitätsklinikum Mainz

number: Telefon +49 6131 19240

#### **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Regulation (EC) No 1272/2008

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

Neopentyl glycol propoxylate diacrylate (NPGPODA)

urethane dimethacrylate (UDMA)

Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate

Signal word: Warning



according to Regulation (EC) No 1907/2006

## **RS VIVO Try-In**

Revision date: 11.03.2025 Product code: RS006199 Page 2 of 11

## Pictograms:





#### **Hazard statements**

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

# **Precautionary statements**

P261 Avoid breathing dust/vapours/spray.
P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection.

P302+P352 IF ON SKIN: Wash with plenty of water and soap.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local regulation.

# Special labelling of certain mixtures

Restricted to professional users.

# 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

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

### 3.2. Mixtures

### **Chemical characterization**

Mixture of acrylic resins and initiators.

# Relevant ingredients

CAS No	Chemical name			Quantity		
	EC No	Index No	REACH No			
	Classification (Regulation (EC) No 1272/2008)					
84170-74-1	Neopentyl glycol propoxylate diacrylate (NPGPODA)					
	Skin Sens. 1, Aquatic Chronic 2; H317 H411					
72869-86-4	4 urethane dimethacrylate (UDMA)					
	Skin Sens. 1B, Aquatic Chronic 2; H317 H411					
84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate			< 5 %		
	282-810-6					
	Skin Sens. 1B, Aquatic Chronic 2;	Skin Sens. 1B, Aquatic Chronic 2; H317 H411				

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



according to Regulation (EC) No 1907/2006

### **RS VIVO Try-In**

Revision date: 11.03.2025 Product code: RS006199 Page 3 of 11

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity		
	Specific Conc. L	imits, M-factors and ATE			
84170-74-1		Neopentyl glycol propoxylate diacrylate (NPGPODA)	15 - 30 %		
	inhalation: LC5	= >2 mg/l (vapours); dermal: LD50 = >2000 mg/kg; oral: LD50 = > 5000 mg/kg			
72869-86-4		urethane dimethacrylate (UDMA)			
	inhalation: LC50 = >5 mg/l (dusts or mists); dermal: LD50 = >2000 mg/kg; oral: LD50 = >5000 mg/kg				
84434-11-7	282-810-6	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	< 5 %		
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg				

### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

Get medical advice/attention if you feel unwell. Immediately remove any contaminated clothing, shoes or stockings.

#### After inhalation

Get medical advice/attention if you feel unwell. Provide fresh air.

## After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Immediately remove any contaminated clothing, shoes or stockings. If skin irritation occurs: Get medical advice/attention.

## After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. If eye irritation persists: Get medical advice/attention.

### After ingestion

Do NOT induce vomiting. Medical treatment necessary.

### 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

Foam, Extinguishing powder, Carbon dioxide.

# Unsuitable extinguishing media

Full water jet

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

In case of fire may be liberated: Carbon monoxide, Carbon dioxide, Hazardous decomposition products.

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

#### 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



according to Regulation (EC) No 1907/2006

## **RS VIVO Try-In**

Revision date: 11.03.2025 Product code: RS006199 Page 4 of 11

#### General advice

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

#### Other information

Larger quantities: Take up mechanically (by pumping). Smaller quantities and/or residues: 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

Do not breathe gas/fumes/vapour/spray.

Provide fresh air.

## Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

# Advice on general occupational hygiene

It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin. 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.

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

## Requirements for storage rooms and vessels

Protect from the action of light. Keep only in the original container at a temperature between 4 -25 °C. Can polymerize with intense heat release.

### Hints on joint storage

No special measures are necessary.

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### **DNEL/DMEL values**

CAS No	Name of agent					
DNEL type		Exposure route	Effect	Value		
72869-86-4	urethane dimethacrylate (UDMA)					
Worker DNEL, long-term		dermal	systemic	1,3 mg/kg bw/day		
Worker DNEL, long-term		inhalation	systemic	3,3 mg/m³		



according to Regulation (EC) No 1907/2006

## **RS VIVO Try-In**

Revision date: 11.03.2025 Product code: RS006199 Page 5 of 11

#### **PNEC** values

CAS No	Name of agent			
Environmental compartment Value		Value		
72869-86-4	urethane dimethacrylate (UDMA)			
Freshwater 0,01 mg/l		0,01 mg/l		
Marine water		0,001 mg/l		
Freshwater sediment		4,56 mg/kg		
Marine sediment		0,46 mg/kg		
Micro-organisms in sewage treatment plants (STP)		3,61 mg/l		
Soil 0,91 mg/kg		0,91 mg/kg		

#### 8.2. Exposure controls

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

### Eye/face protection

Eye glasses with side protection

## Hand protection

Gloves should be replaced regularly, especially after extended contact with the product. For each work-place a suitable glove type has to be selected.

### Skin protection

Wear suitable protective clothing.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: Liquid Colour: white

Odour: No data available

Melting point/freezing point:

Boiling point or initial boiling point and

not determined
not determined

boiling range:

not determined Flammability: Lower explosion limits: not determined Upper explosion limits: not determined > 100 °C Flash point: Auto-ignition temperature: not determined Decomposition temperature: not determined pH-Value: not determined Viscosity / kinematic: not determined Water solubility: not determined

Solubility in other solvents

not determined

Dissolution rate: not determined Partition coefficient n-octanol/water: not determined Dispersion stability: not determined Vapour pressure: not determined Density (at 20 °C): not determined Relative density: not determined Bulk density: not determined Relative vapour density: not determined Particle characteristics: not applicable





according to Regulation (EC) No 1907/2006

### **RS VIVO Try-In**

Revision date: 11.03.2025 Product code: RS006199 Page 6 of 11

## 9.2. Other information

### Information with regard to physical hazard classes

Self-ignition temperature

Solid: not applicable
Gas: not applicable

Other safety characteristics

Evaporation rate: not determined Solid content: not determined

#### **Further Information**

Product has not been tested. The statement is derived from the properties of the components.

## **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

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

#### 10.4. Conditions to avoid

Protect from the action of light. Keep only in the original container at a temperature between 4 -25 °C. Can polymerize with intense heat release.

## 10.5. Incompatible materials

Oxidising agent, Reducing agent, Heavy metals, Acids, Alkali (Iye).

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## **SECTION 11: Toxicological information**

## 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



according to Regulation (EC) No 1907/2006

## **RS VIVO Try-In**

Revision date: 11.03.2025 Product code: RS006199 Page 7 of 11

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
84170-74-1	Neopentyl glycol propoxylate diacrylate (NPGPODA)					
	oral	LD50 mg/kg	> 5000			
	dermal	LD50 mg/kg	>2000			
	inhalation vapour	LC50	>2 mg/l			
72869-86-4	urethane dimethacrylate (UDMA)					
	oral	LD50 mg/kg	>5000	Rat	OECD 401	
	dermal	LD50 mg/kg	>2000	Rat	OECD 402	
	inhalation (4 h) dust/mist	LC50	>5 mg/l			
84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate					
	oral	LD50 mg/kg	> 5000	Rat		
	dermal	LD50 mg/kg	> 2000	Rat		

## Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

### Sensitising effects

May cause an allergic skin reaction. (Neopentyl glycol propoxylate diacrylate (NPGPODA); urethane

dimethacrylate (UDMA); Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate)

May cause sensitization by skin contact.

### Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Reproductive toxicity: 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

# Further information

The product has not been tested. The statement is derived from the properties of the single components.

# **SECTION 12: Ecological information**

## 12.1. Toxicity



according to Regulation (EC) No 1907/2006

## **RS VIVO Try-In**

Revision date: 11.03.2025 Product code: RS006199 Page 8 of 11

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
84170-74-1	Neopentyl glycol propoxylate diacrylate (NPGPODA)						
	Acute fish toxicity	LC50 mg/l	>2,7	96 h	Danio rerio (zebrafish)		
	Acute algae toxicity	ErC50	11 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EC50	37 mg/l		Daphnia magna (Big water flea)		
72869-86-4	-4 urethane dimethacrylate (UDMA)						
	Acute fish toxicity	LC50 mg/l	10,1	96 h	Danio rerio (zebrafish)	OECD 203	
	Acute algae toxicity	ErC50 mg/l	>0,68	72 h	Desmodesmus subspicatus	OECD 201	
	Acute crustacea toxicity	EC50 mg/l	>1,2		Daphnia magna (Big water flea)		
84434-11-7	Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate						
	Acute fish toxicity	LC50 mg/l	1,89	96 h	Danio rerio		
	Acute algae toxicity	ErC50 mg/l	1,01	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 mg/l	2,26	48 h	Daphnia magna		

# 12.2. Persistence and degradability

The product has not been tested.

	oddot has not been tested.					
CAS No	Chemical name					
	Method	Value	d	Source		
	Evaluation					
84170-74-1	Neopentyl glycol propoxylate diacrylate (NPGPODA)					
	OECD 301 D 41 % 28					
	Not readily biodegradable (according to OECD criteria)					
72869-86-4	urethane dimethacrylate (UDMA)					
	Biodegradation	22 %	28	OECD 301 F		

### 12.3. Bioaccumulative potential

The product has not been tested.

# 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 uncontrolled discharge of product into the environment. Do not allow to enter into surface water or drains.



according to Regulation (EC) No 1907/2006

### **RS VIVO Try-In**

Revision date: 11.03.2025 Product code: RS006199 Page 9 of 11

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

### **Disposal recommendations**

Small quantities can be polymerized by light and the cured solid material can be disposed of with the regular garbage. Larger quantities must be disposed of following the regulations of the local authorities. Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

# List of Wastes Code - residues/unused products

070208 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic

rubber and man-made fibres; other still bottoms and reaction residues; hazardous waste

## List of Wastes Code - used product

070208 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic

rubber and man-made fibres; other still bottoms and reaction residues; hazardous waste

#### List of Wastes Code - contaminated packaging

070208 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic

rubber and man-made fibres; other still bottoms and reaction residues; hazardous waste

#### Contaminated packaging

This material and its container must be disposed of as hazardous waste. 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.

(ACRYLIC RESIN)

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
Transport category: 3
Hazard No: 90
Tunnel restriction code: E

## Other applicable information (land transport)

SV 375: These substances, when carried in single or combination packagings of a net quantity not exceeding 5 litres of liquids or a net mass not exceeding 5 kg of solids per single or combination packaging, are not subject to the other provisions of ADR, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

#### 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.

(ACRYLIC RESIN)

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



according to Regulation (EC) No 1907/2006

**RS VIVO Try-In** 

Revision date: 11.03.2025 Product code: RS006199 Page 10 of 11

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.

(ACRYLIC RESIN)

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.

(ACRYLIC RESIN)

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

Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A97 A158 A197

30 kg G

Y964

Excepted quantity:

E1

IATA-packing instructions - Passenger:964IATA-max. quantity - Passenger:450 LIATA-packing instructions - Cargo:964IATA-max. quantity - Cargo:450 L

### Other applicable information (air transport)

A 197: These substances are not subject to other provisions of these Regulations when carried in single or combination packagings with a net quantity per single or inner packaging not exceeding 5 L for liquids and a net weight not exceeding 5kg for substances, provided the packagings meet the general requirements of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

## 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

Danger releasing substance: Acrylic-resin

# 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

Restrictions on use (REACH, annex XVII):

Entry 3

## National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

### 15.2. Chemical safety assessment

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

## **SECTION 16: Other information**





according to Regulation (EC) No 1907/2006

# **RS VIVO Try-In**

Revision date: 11.03.2025 Product code: RS006199 Page 11 of 11

#### Abbreviations and acronyms

Skin Sens: Skin sensitisation

Aquatic Chronic: Chronic aquatic hazard

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.

H411 Toxic to aquatic life with long lasting effects.

#### **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.

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