

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 22.11.2023

Version number 2202 (replaces version 2201)

Revision: 22.11.2023

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

#### 1.1 Product identifier

Trade name:

**Resinwork Dentist AQUA 1**

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

Life cycle stages

IS Use at industrial Sites

Sector of Use

PW Widespread use by professional workers

Product category

SU7 Printing and reproduction of recorded media

Process category

PC32 Polymer preparations and compounds

Environmental release category

PROC13 Treatment of articles by dipping and pouring

ERC2 Formulation into mixture

ERC6c Use of monomer in polymerisation processes at industrial site (inclusion or not into/onto article)

Article category

AC0 Other

Technical function

Resins (prepolymers)

Application of the substance / the mixture

Acrylic resin

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

Manufacturer/Supplier:

Graichen Produktions- und Vertriebs GmbH

Darmstädter Str.127

D-64625 Bensheim

Tel.: +49(0)6251 / 7707880

Fax: +49(0)6251 / 77901

e-Mail: ehs@graichen-bensheim.de

http://www.graichen.net

Further information obtainable from:

Product Safety Department

Emergency medical information in case of poisoning:

#### 1.4 Emergency telephone number:

Poison Information Centre Mainz - 24h -.

Tel.: +49 (0) 6131 19240

Graichen: During business hours :+49(0)6251 7707880

Graichen: Outside business hours:+49(0)172 7478476

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

The product is classified and labelled according to the GB CLP regulation.



GHS07

Signal word

Warning

Hazard-determining components of labelling:

hexamethylene diacrylate

Photoinitiator

Hazard statements

H302+H312 Harmful if swallowed or in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261

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

P264

Wash thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P280

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

P301+P312

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330

Rinse mouth.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Additional information: 7.5 % of the mixture consists of component(s) of unknown toxicity. Contains 7.5 % of components with unknown hazards to the aquatic environment.

**2.3 Other hazards**

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

Dangerous components:

	Acrylated monomer 3	10 – 25%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	
	Acrylated oligomer 2	10 – 25%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	
	Acrylated oligomer 3	10 – 25%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	
	Acrylated monomer 2	10 – 25%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	
	Acrylated monomer 1	10 – 25%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	
	Acrylated oligomer 1	2.5 – 10%
	⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319	
CAS: 13048-33-4 EINECS: 235-921-9	hexamethylene diacrylate	2.5 – 10%
	⚠ Aquatic Acute 1, H400; Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 947-19-3 EINECS: 213-426-9	Photoinitiator	< 2.5%
	⚠ Skin Sens. 1, H317	

Additional information: For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

General information:

Take affected persons out of danger area and lay down.  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.  
Use a respiratory bag or breathing device.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: If skin irritation continues, consult a doctor.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Induce vomiting only, if affected person is fully conscious.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

A person vomiting while laying on their back should be turned onto their side.

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

No further relevant information available.

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

No further relevant information available.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

Suitable extinguishing agents:

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.

For safety reasons unsuitable extinguishing agents:

Full jet water

**5.2 Special hazards arising from the substance or mixture**

No further relevant information available.

**5.3 Advice for firefighters**

Protective equipment:

Wear self-contained respiratory protective device.  
Do not inhale explosion gases or combustion gases.

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### SECTION 6: Accidental release measures

- . **6.1 Personal precautions, protective equipment and emergency procedures**
  - Ensure adequate ventilation
  - Keep away from ignition sources.
  - Wear protective equipment. Keep unprotected persons away.
- . **6.2 Environmental precautions:**
  - Do not allow to enter sewers/ surface or ground water.
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Keep contaminated washing water and dispose of appropriately.
- . **6.3 Methods and material for containment and cleaning up:**
  - Absorb liquid components with liquid-binding material.
- . **6.4 Reference to other sections**
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

### SECTION 7: Handling and storage

- . **7.1 Precautions for safe handling**
  - Ensure good ventilation/exhaustion at the workplace.
  - Ensure that suitable extractors are available on processing machines
- . Information about fire - and explosion protection:
  - Keep ignition sources away - Do not smoke.
- . **7.2 Conditions for safe storage, including any incompatibilities**
  - Store only in the original receptacle.
  - Do not store together with alkalis (caustic solutions).
  - Store away from oxidising agents.
  - Store away from reducing agents.
- . Further information about storage conditions:
  - Store receptacle in a well ventilated area.
  - Store in a cool place.
  - Protect from heat and direct sunlight.
- . **7.3 Specific end use(s)**
  - No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- . **8.1 Control parameters**
  - Ingredients with limit values that require monitoring at the workplace:
    - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - Additional information:
    - The lists valid during the making were used as basis.
- . **8.2 Exposure controls**
  - Appropriate engineering controls
    - No further data; see section 7.
  - Individual protection measures, such as personal protective equipment
    - General protective and hygienic measures:
      - Wash hands before breaks and at the end of work.
      - Do not eat, drink, smoke or sniff while working.
      - Do not inhale gases / fumes / aerosols.
    - Respiratory protection:
      - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
    - Hand protection
      - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
      - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
      - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
    - Material of gloves
      - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
    - Penetration time of glove material
      - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
    - Eye/face protection
      - Tightly sealed goggles
      - Face protection
    - Body protection:
      - Protective work clothing
      - Solvent resistant protective clothing

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### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

General Information	
Physical state	Solid
Colour:	Whitish
Odour:	Characteristic
Odour threshold:	Not determined.
Boiling point or initial boiling point and boiling range	> 145 °C
Flammability	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH at 20 °C	7.7
Viscosity:	
Kinematic viscosity	Not applicable.
Dynamic at 20 °C:	250 – 350 mPas
Solubility	
water:	Soluble.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
	Not applicable.
Density and/or relative density	
Density at 20 °C:	1.08 g/cm <sup>3</sup>
Relative density	Not determined.
Vapour density	Not applicable.

#### 9.2 Other information

Appearance:	
Form:	Liquid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Not determined.
Change in condition	
Evaporation rate	Not applicable.

#### Information with regard to physical hazard classes

Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

### SECTION 10: Stability and reactivity

10.1 Reactivity	No further relevant information available.
10.2 Chemical stability	
Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions	No dangerous reactions known.
10.4 Conditions to avoid	No further relevant information available.
10.5 Incompatible materials:	No further relevant information available.
10.6 Hazardous decomposition products:	Carbon monoxide and carbon dioxide

### SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008	
Acute toxicity	Harmful if swallowed or in contact with skin.

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. LD/LC50 values relevant for classification:

Oral	LD50	> 1,050 mg/kg (rat)
Dermal	LD50	> 1,050 mg/kg (rat)

**CAS: 13048-33-4 hexamethylene diacrylate**

Oral	LD50	> 5,000 mg/kg (rat)
Dermal	LD50	> 3,000 mg/kg (rab)

- . Skin corrosion/irritation Causes skin irritation.
- . Serious eye damage/irritation Causes serious eye irritation.

Irritation of eyes | Augenreiz- und -ätzwirkung | (rab)

- . Respiratory or skin sensitisation May cause an allergic skin reaction.

Sensitisation | Sensibilisierung |

**. 11.2 Information on other hazards**

- . Endocrine disrupting properties
- . None of the ingredients is listed.

**SECTION 12: Ecological information****. 12.1 Toxicity**

. Aquatic toxicity:

LC50 acute (96h)	> 25 mg/l (danio rerio/ Zebraabräbling)
EC50 (48h)	> 300 mg/l (Ceriodaphnia dubia (Wasserfloh))
EC50 (72h)	≥ 200 mg/l (Lemna aequinoctialis - Wasserpflanzen)

**. 12.2 Persistence and degradability**

Biodegradability | %

- . **12.3 Bioaccumulative potential** No further relevant information available.

- . **12.4 Mobility in soil** No further relevant information available.

**. 12.5 Results of PBT and vPvB assessment**

- . PBT: Not applicable.
- . vPvB: Not applicable.

**. 12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

**. 12.7 Other adverse effects**

. Additional ecological information:

- . General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**SECTION 13: Disposal considerations****. 13.1 Waste treatment methods**

. European waste catalogue

HP4	Irritant - skin irritation and eye damage
HP14	Ecotoxic

- . Uncleaned packaging:
- . Recommendation: Non contaminated packagings may be treated like household garbage.
- . Recommended cleansing agents: Water, if necessary together with cleansing agents.

**SECTION 14: Transport information****. 14.1 UN number or ID number**

ADR, ADN, IMDG, IATA Void

**. 14.2 UN proper shipping name**

ADR, ADN, IMDG, IATA Void

**. 14.3 Transport hazard class(es)**ADR, ADN, IMDG, IATA  
Class Void**. 14.4 Packing group**

ADR, IMDG, IATA Void

. **14.5 Environmental hazards:** Not applicable.

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. <b>14.6 Special precautions for user</b>	Not applicable.
. <b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
. UN "Model Regulation":	Void

### SECTION 15: Regulatory information

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

. Poisons Act

. Regulated explosives precursors

None of the ingredients is listed.

. Regulated poisons

None of the ingredients is listed.

. Reportable explosives precursors

None of the ingredients is listed.

. Reportable poisons

None of the ingredients is listed.

. Directive 2012/18/EU

. Named dangerous substances - ANNEX I

None of the ingredients is listed.

. **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

. Department issuing SDS:

Environment protection department.

. Abbreviations and acronyms:

ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 Acute Tox. 4: Acute toxicity – Category 4  
 Skin Irrit. 2: Skin corrosion/irritation – Category 2  
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
 Skin Sens. 1: Skin sensitisation – Category 1  
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2  
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

. \* Data compared to the previous version altered.

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