

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

### 1.1 Product identifier

· **Trade name:** Aligner Flow LC - Data sheet for medical devices / EU

#### · **Chemical Identification:**

This product is a medical device according to Directive 93/42/EEC concerning medical devices or Regulation (EU) 2017/745 (MDR), which is used invasively or in contact with the body. Therefore, it is exempt from the classification and labelling requirements of Regulation (EC) 1272/2008 (AR GB CLP, Article 1, paragraph 5 d).

A safety data sheet is not required by law for this product. This information is provided on a voluntary basis in the form of this Medical Devices / EU Data Sheet.

· **Product category** Dental medical device

#### · **Article category**

The information relevant for the application and for the safety of users and patients is defined in the product-specific directions for use. The instructions for use must be observed.

Use of the product only by personnel trained in dentistry.

· **Application of the substance / the mixture** Dental filling material

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

#### · **Manufacturer/Supplier:**

VOCO GmbH

Anton-Flettner-Str. 1-3

D-27472 Cuxhaven

info@voco.de

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## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### · **Classification according to Regulation (EC) No 1272/2008**

This product is a medical device according to Directive 93/42/EEC concerning medical devices or Regulation (EU) 2017/745 (MDR), which is used invasively or in contact with the body. Therefore, it is exempt from the classification and labelling requirements of Regulation (EC) 1272/2008 (AR GB CLP, Article 1, paragraph 5 d).

The classification criteria of Regulation (EC) No 1272/2008 are not directly applicable to this product, but are considered by us as an orienting basis for assessment. The health and environmental hazards have been assessed and classified on the basis of the information known to us on the components and their reaction processes. The following hazards based on the classification criteria of Regulation (EC) No 1272/2008 for humans and the environment cannot be excluded:

Eye Dam. 1 H318 Causes serious eye damage.

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

### 2.3 Other hazards

#### · **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

### 3.2 Chemical characterisation: Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

#### · **Dangerous components:**

CAS: 13048-33-4 EINECS: 235-921-9	hexamethylene diacrylate ----- Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	>2.5-≤10%
CAS: 1565-94-2	(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate ----- Eye Dam. 1, H318; Skin Sens. 1, H317	>2.5-≤10%
	TEDGMA ----- Skin Sens. 1, H317	>2.5-≤10%

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**· Additional information:***Further information on ingredients can be found in the instructions for use.**In case of known hypersensitivity to the ingredients mentioned in the instructions for use, do not use the product.***SECTION 4: First aid measures****· 4.1 Description of first aid measures****· General information:** *No special measures required.***· After inhalation:** *Supply fresh air; consult doctor in case of complaints.***· After skin contact:** *Generally the product does not irritate the skin.***· After eye contact:** *Rinse opened eye for several minutes under running water.***· After swallowing:** *If symptoms persist consult doctor.***· 4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.***· 4.3 In case of contact with mucous membranes during treatment:** *No special measures required.***SECTION 5: Firefighting measures****· 5.1 Extinguishing media****· Suitable extinguishing agents:** *Use fire extinguishing methods suitable to surrounding conditions.***· 5.2 Special hazards arising from the substance or mixture** *No further relevant information available.***· 5.3 Advice for firefighters****· Protective equipment:** *No special measures required.***SECTION 6: Accidental release measures****· 6.1 Personal precautions, protective equipment and emergency procedures** *Not required.***· 6.2 Environmental precautions:** *No special measures required.***· 6.3 Methods and material for containment and cleaning up:** *Pick up mechanically.***· 6.4 Reference to other sections***See Section 7 for information on safe handling.**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***No special precautions are necessary if used correctly.**For use in dental application only.**Observe the instructions for use! This contains the relevant application and safety information for the use of this product.***· Information about fire - and explosion protection:** *No special measures required.***· 7.2 Conditions for safe storage, including any incompatibilities****· Storage:****· Requirements to be met by storerooms and receptacles:** *No special requirements.***· Information about storage in one common storage facility:** *Not required.***· Further information about storage conditions:***Please observe the storage instructions on the packaging and in the instructions for use.***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.*

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**· Additional information:**

The listed components are not present in this product in the form relevant for assessment according to the limit values mentioned. Due to the proportions contained in relation to the amount of product during use and the way it is incorporated into the product, monitoring of specific, workplace-related limit values is not applicable.

**· 8.2 Exposure controls****· Personal protective equipment:****· General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

In the context of the use of this product, the hygiene standards customary and general in dental practice, such as hand, mouth and eye protection, must be applied.

**SECTION 9: Physical and chemical properties****· 9.1 Information on basic physical and chemical properties****· General Information****· Appearance:**

<b>Form:</b>	Pasty
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**· pH-value:** Not determined.

**· Change in condition** Material cures under UV light.  
Follow the instructions for light curing in the Instructions for Use.

**· Melting point/freezing point:** Undetermined.

**· Initial boiling point and boiling range:** Undetermined.

**· Flash point:** Not applicable.

**· Flammability (solid, gas):** Not applicable.

**· Decomposition temperature:** Not determined.

**· Auto-ignition temperature:** Product is not selfigniting.

**· Explosive properties:** Product does not present an explosion hazard.

**· Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

**· Vapour pressure:** Not determined.

**· Density:** Not determined.

**· Relative density** Not determined.

**· Vapour density** Not determined.

**· Solubility in / Miscibility with water:** Insoluble.

**· Partition coefficient: n-octanol/water:** Not determined.

**· Viscosity:**

<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.

**· 9.2 Other information** No further relevant information available.

**SECTION 10: Stability and reactivity**

**· 10.1 Reactivity** Light curing with commercially available polymerisation units.

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- **10.2 Chemical stability** *Stable.*
- **Thermal decomposition / conditions to be avoided:** *No decomposition if used 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:**  
*Phenolic substances, especially preparations containing eugenol and thymol, lead to curing disorders. The use of zinc oxide-eugenol cements or other eugenol-containing materials in combination with this product should be avoided.*
- **10.6 Hazardous decomposition products:** *No dangerous decomposition products known.*

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**  
*As an invasive medical device, the product is subject to relevant laws and standards which ensure the safety and performance of the product when used properly and in accordance with the instructions for use. Specific toxicological information is not applicable at this point. The instructions for use must be observed.*

**SECTION 12: Ecological information**

- **General notes:**  
*As an invasive medical device, the product is subject to relevant laws and standards that ensure the safety and performance of the product when used properly and in accordance with the instructions for use. Special environmental information is not applicable at this point. The instructions for use must be observed.*

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
*Dispose of in accordance with official regulations. For further information, see the instructions for use.*
- **Uncleaned packaging:**
- **Recommendation:** *Disposal must be made according to official regulations.*

**SECTION 14: Transport information**

- |   |                        |
|---|------------------------|
| · <b>14.1 UN-Number</b><br>· <b>ADR, IMDG, IATA</b>   | <i>Void</i>            |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR, IMDG, IATA</b>                           | <i>Void</i>            |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Class</b> | <i>Void</i>            |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                     | <i>Void</i>            |
| · <b>14.5 Environmental hazards:</b>  | <i>Not applicable.</i> |
| · <b>14.6 Special precautions for user</b>  | <i>Not applicable.</i> |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>            | <i>Not applicable.</i> |

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· UN "Model Regulation": *Void*

### SECTION 15: Regulatory information

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

Regulation (EU) 2017/745

Medical Devices Regulation

· **15.2 Chemical safety assessment:**

The health and environmental hazards have been assessed and classified on the basis of the information known to us on the components and their reaction processes.

A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

The product to which this data sheet is assigned is a medical device according to the EU Medical Devices Regulation EU 2017/745. Invasive medical devices or medical devices in direct body contact are exempted from the classification and labelling requirements of Regulation (EU) 1272/2008 (AR GB CLP, Article 1, paragraph 5 d). The Medical Devices Regulation does not require a safety data sheet for invasive medical devices or medical devices in direct body contact, as the safe use of the product is indicated in the instructions for use and/or the labelling. Nevertheless, VOCO GmbH provides a data sheet for medical devices in order to provide as transparent a source as possible for the assessment of hazards to humans and the environment. 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.

· **Relevant phrases**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

· **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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1