

**Safety Data Sheet****PMMA block / Artificial teeth OMP-N + HMP-N**

Revision date: 06.09.2017

Product code: D101-1

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**1. Identification****Product identifier**

PMMA block / Artificial teeth OMP-N + HMP-N

**Further trade names**

artBloc® Temp

artegral® life, artegral®, Polystar® Selection EDITION, integral®, Polystar® Lux HK,

Polystar® Selection EDITION 2, DeltaForm®, Polystar Lux® HK

M-PM® Disc

BDLoad®

artVeneer®

**Recommended use of the chemical and restrictions on use****Use of the substance/mixture**

The product is intended for professional use.

**Uses advised against**

Do not use for private purposes (household).

**Details of the supplier of the safety data sheet**

Company name:	Merz Dental GmbH	
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Place:	D-24321 Lütjenburg (GERMANY)	
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Internet:	www.merz-dental.de	
Responsible Department:	Qualitätssicherung (Quality Assurance)	

**Emergency phone number:** +49-(0)551-19240 (Giftinformationszentrum-Nord)**Further Information**

none

**2. Hazard(s) identification****Classification of the chemical****Regulation (EC) No. 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

**Label elements****Regulation (EC) No. 1272/2008****Additional advice on labelling**

There is no requirement for the product to be specially labelled according to EC directives or the corresponding national laws.

**Hazards not otherwise classified**

Harmful dust is produced during dry-state pulverisation. Inhalation of dust may cause irritation of the respiratory system.

**3. Composition/information on ingredients****Mixtures****Chemical characterization**

POLYMETHYL METHACRYLATE

**Further Information**

May cause sensitisation by skin contact.

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**4. First-aid measures****Description of first aid measures****General information**

No special measures are necessary.

**After inhalation**

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary. Inhalation of dust may cause irritation of the respiratory system. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately.

**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. If skin irritation occurs: Get medical advice/attention. After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water. 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. No known symptoms to date. Observe risk of aspiration if vomiting occurs. When in doubt or if symptoms are observed, get medical advice.

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

Allergic reactions

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

Treat symptomatically. Apply cortisone spray at early stage.

**5. Fire-fighting measures****Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. Water mist, Foam, Carbon dioxide (CO<sub>2</sub>), Extinguishing powder

**Unsuitable extinguishing media**

High power water jet

**Specific hazards arising from the chemical**

Non-flammable. This material is combustible, but will not ignite readily. Exothermal decomposition with formation of: Carbon dioxide (CO<sub>2</sub>), Carbon monoxide.

**Special protective equipment and precautions for fire-fighters**

In case of fire: Wear self-contained breathing apparatus. Wear a self-contained breathing apparatus and chemical protective clothing. Co-ordinate fire-fighting measures to the fire surroundings. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Do not inhale explosion and combustion gases.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Use personal protection equipment.

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### Environmental precautions

Do not allow to enter into surface water or drains. No special environmental measures are necessary. Avoid release to the environment.

### Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Wet clean or vacuum up solids. Use approved industrial vacuum cleaner for removal. Do not use a dry brush as dust clouds or static can be created.

### Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13 Safe handling: see section 7. Personal protection equipment: see section 8. Disposal: see section 13.

## 7. Handling and storage

### Precautions for safe handling

#### **Advice on safe handling**

Measures to prevent aerosol and dust generation. Do not breathe dust. Dust should be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

#### **Advice on protection against fire and explosion**

No special fire protection measures are necessary.

#### **Further information on handling**

Dust should be exhausted directly at the point of origin.

### Conditions for safe storage, including any incompatibilities

#### **Requirements for storage rooms and vessels**

Keep container tightly closed. Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

#### **Advice on storage compatibility**

To follow: Storage class

#### **Further information on storage conditions**

Protect against direct sunlight.

## 8. Exposure controls/personal protection

### Control parameters

#### **Additional advice on limit values**

Monitoring and observation processes: Monitoring and observation processes see for example "NIOSH Manual of Analytical Methods", National Institute for Occupational Safety and Health.

### Exposure controls



#### **Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation should be used if possible. Hand tool with integrated exhaust. Use an "effective exhaust ventilation system" according to 2001/59/EC (Annex 7A).. Preferably use hand tools or low-speed tools equipped, if necessary, with an appropriate dust-extraction facility. If high-speed tools are used, they should always be equipped with such a facility.

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### Protective and hygiene measures

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink. When using do not eat, drink, smoke, sniff. Do not breathe dust. General health and safety measures.

### Eye/face protection

Wear eye/face protection. Dust protection eye glasses.

### 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. Tested protective gloves must be worn. Wear cotton undermitten if possible. Take recovery periods for skin regeneration.

### Skin protection

Wear suitable protective clothing. Wear suitable protective clothing.

### Respiratory protection

In case of inadequate ventilation wear respiratory protection. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Respiratory protection necessary at: exceeding exposure limit values. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

### Environmental exposure controls

No special environmental measures are necessary.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state:	solid
Color:	whitish - light beige
Odor:	odourless

### Test method

pH-Value:	not applicable
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### Changes in the physical state

Melting point/freezing point:	not applicable
Initial boiling point and boiling range:	not applicable
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
Flash point:	> 250 °C ASTM D 1929-68
Sustaining combustion:	Not sustaining combustion

### Flammability

Solid:	not determined
Gas:	not applicable

### Explosive properties

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	> 400 °C ASTM D 1929-68

### Auto-ignition temperature

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Solid: not determined  
 Gas: not applicable

Decomposition temperature: > 250 °C

**Oxidizing properties**

This material is combustible, but will not ignite readily.

Vapor pressure: not applicable

Vapor pressure: not applicable

Density: 1,189 – 1,198 g/cm³

Bulk density: not applicable

Water solubility: insoluble

**Solubility in other solvents**

not determined

Partition coefficient: not applicable

Viscosity / dynamic: not applicable

Viscosity / kinematic: not applicable

Flow time: not applicable

Vapor density: not applicable

Evaporation rate: not applicable

Solvent separation test: not applicable

Solvent content: not applicable

**Other information**

Solid content: 100 %

none

**10. Stability and reactivity****Reactivity**

No hazardous reaction when handled and stored according to provisions.

**Chemical stability**

The product is chemically stable under recommended conditions of storage, use and temperature.

Decomposition takes place from temperatures above: > 250 °C

**Possibility of hazardous reactions**

No hazardous reaction when handled and stored according to provisions.

**Conditions to avoid**

Harmful dust is produced during dry-state pulverisation.

**Incompatible materials**

Oxidising agent, strong

**Hazardous decomposition products**

Thermal decomposition can lead to the escape of irritating gases and vapours. Hazardous decomposition products: SECTION 8: Exposure controls/personal protection (Control parameters)

**Further information**

none

**11. Toxicological information****Information on toxicological effects**

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**Toxicokinetics, metabolism and distribution**

No information available.

**Acute toxicity**

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

No information available.

**Irritation and corrosivity**

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

No information available.

**Sensitizing effects**

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

May cause sensitisation especially in sensitive humans. People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

Based on existing data the substance does not fulfill the criteria of CMR-substances Cat. 1 and 2 according 67/548/EEC. The ingredients in this mixture do not meet the criteria for classification as CMR category 1 A or 1B according to CLP. No indications of human germ cell mutagenicity exist. No indications of human reproductive toxicity exist.

**Specific target organ toxicity (STOT) - single exposure**

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

No information available.

**Specific target organ toxicity (STOT) - repeated exposure**

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

No information available.

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): No ingredient of this mixture is listed.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

**Aspiration hazard**

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

No information available.

**Specific effects in experiment on an animal**

No information available.

**Additional information on tests**

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP]. none

**Practical experience****Observations relevant to classification**

No information available.

**Other observations**

No information available.

**Further information**

Toxicological data are not available. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Do not breathe dusts or mists.

**12. Ecological information****Ecotoxicity**

Due to the consistency along with the low water solubility of the product a bioavailability is unlikely.

**Persistence and degradability**

There are no data available on the preparation/mixture itself. According to experiences this product is inert and not degradable.

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### Bioaccumulative potential

Water solubility < 1 mg/L at 20°C. The product has not been tested. On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment is unlikely.

### Mobility in soil

No data available.

### Other adverse effects

No data available.

### Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. none

## 13. Disposal considerations

### Waste treatment methods

#### **Advice on disposal**

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. Waste disposal according to EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, covering waste and dangerous waste. Dispose according to legislation. Can be incinerated together with household waste in compliance with applicable technical regulations following consultation with approved waste disposal management companies and authorities in charge.

#### **Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. Recycling possible without special treatment.. May be disposed of in household waste landfill. Recycle sales packaging via DSD (Duales System Deutschland).

## 14. Transport information

### **US DOT 49 CFR 172.101**

**Proper shipping name:** Not restricted

### **Marine transport (IMDG)**

**UN number:** Not restricted

**UN proper shipping name:** Not restricted

**Transport hazard class(es):** Not restricted

**Packing group:** Not restricted

### **Air transport (ICAO-TI/IATA-DGR)**

**UN number:** Not restricted

**UN proper shipping name:** Not restricted

**Transport hazard class(es):** Not restricted

**Packing group:** Not restricted

### **Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

### **Special precautions for user**

No information available.

### **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

not applicable

### **Other applicable information**

No dangerous good in sense of this transport regulation.

## 15. Regulatory information

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**U.S. Regulations****State Regulations****Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**16. Other information****Changes**

Revision date: 06.09.2017

Revision No: 5

This data sheet contains changes from the previous version in section(s): 1,3,4,5,6,7,8,9,10,11,12,13,14,15,16.

**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%

**Other data**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Key literature references and sources for data: Hazardous ingredients

ECHA - REACH Dossier

OECD - SIDS

EPA - Chemistry Dashboard

ICCA - GPS Chemicals Portal

TOXNET - ChemIDplus

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