

SAFETY DATA SHEET

according to EC- directive 1907/2006/EC



Product Trade Name: ORTHOMET POWDER

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Revision Date 11/12/16

Version 4

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier
Product Name ORTHOMET POWDER
Based on poly ethyl methacrylate (PEMA) homo-polymer
CAS-No. 9003-42-3 (PEMA)
EC No. None

Relevant identified uses of the substance or mixture and uses advised against
For use in dental applications.

Details of the supplier of the safety data sheet

Supplier Metrodent Limited
Lowergate Works, Lowergate
Paddock, Huddersfield
United Kingdom
+44 1484 461616
sales@metrodent.com

Emergency contacts

Office Hours Metrodent Limited
+44 1484 461616

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

This substance is classified as non-hazardous according to GHS
Regulation EC1272/2008

Health None

Label elements

In Accordance with Regulation EC 1272/2008

Signal word None

GHS Pictogram None

Hazard Statement None

Precautionary Statement

(Prevention) P281 Use personal protective equipment as required

(Response) P312 Call a POISON CENTER or doctor/physician if you feel unwell

P330 Rinse mouth

(Disposal) P501 Dispose of contents/container in accordance with local regulation

Hazardous components for labelling None

Other hazards None

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	In Accordance with Regulation EC 1272/2008
Component	Poly Ethyl Methacrylate
CAS No.	9003-42-3
EC Index No.	-
REACH No.	Exempt
EINECS No.	-
Content	>99%
Hazard/category/statement	None

4. FIRST AID MEASURES

Description of first aid measures	
General advice	No special measures required.
Inhalation	The product is not a respiratory irritant.
Skin contact	The product is not skin irritating.
Eye contact	Flush with plenty of water. Consult a doctor if irritation occurs.
Ingestion	Drink plenty of water. Induce vomiting and consult a doctor
Most important symptoms and effects, both acute and delayed	None
Indication of any immediate medical attention and special treatment needed	No

5. FIRE-FIGHTING MEASURES

Extinguishing media	
Suitable extinguishing media	Water mist, extinguishing powder, carbon dioxide
Unsuitable extinguishing media	Do not use direct water stream
Special hazards arising from the substance or mixture	No
Advice for firefighters	Use water spray to cool unopened containers

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	No special measures required. No dangerous materials are released.
Environmental procedures	No special measures required.
Methods and material for containment and cleaning up	Clean up mechanically.
Reference to other sections	For personal protection see section 8. For disposal considerations see section 13.

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7. HANDLING AND STORAGE

Precautions for safe handling	Only adequately trained personnel should handle the product. Use hygienic measures for dental practise.
Conditions of safe storage, including any incompatibilities	Store in a cool, dry area.
Specific end use(s)	-

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters	Substance contains no components or products of decomposition according to point 10, with limit values related to the place of work, which require monitoring. However, manufacturer recommends:
Poly Methyl Methacrylate	CAS No. 9011-14-7
WEL	10mg/m ³
Exposure controls	
General protective measures	Usual precautionary measures should be employed when handling the material.
Personal Protective Equipment	
Hygiene measures	Use hygienic measures for dental practise.
Respiratory protection	If workplace exposure limit is exceeded (leakage, spillage), apply dust mask with P2 particle filter.
Hand protection	In practise, as the product is a preparation of several substances, resistance tests of glove materials cannot be conducted in advance and should be performed by the end user prior to application. A suitable glove type should be selected for each work environment. On the whole, for permanent contact in work areas, natural latex (NR) gloves are suitable.
Eye protection	Not required, but safety goggles are recommended.
Body protection	On handling larger quantities: light weight protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form	Powder
Colour	According to product specification
Odour	None
Melting Temperature	n/a
Boiling Temperature	n/a
Flashpoint	n/a
Ignition Temperature	>400°C
Lower Explosion Limit	20g/m ³
Upper Explosion Limit	not determined
Vapour Pressure	n/a
Relative Density	1.2g/cm ³ @ 20°C
Relative Vapour Density	n/a
Solubility in Water	not soluble
Solubility (Qualitative)	Soluble in organic solvents
pH value	n/a
Partition Co-efficient	n/a
Viscosity (Dynamic)	not determined
Other information	

The product is not self-igniting or explosive, however formation of explosive powder/air mixtures is possible.

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10. STABILITY AND REACTIVITY

Reactivity	Avoid contact with other chemicals.
Chemical stability	Stable under normal temperature conditions and when used as directed. Decomposition can occur at elevated temperatures (>250°C), releasing potentially irritating vapours (methyl methacrylate).
Possibility of hazardous reactions	No hazardous reactions known when used as directed.
Conditions to avoid	The product is supplied in a stable form. Protect from humidity.
Incompatible materials	None known.
Hazardous decomposition products	Organic products of decomposition. No decomposition occurs when used as directed.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects	
Metabolism	-
Acute Oral Toxicity	LD50 rat (PMMA) > 10000mg/kg
Acute Inhalation Toxicity	not toxic
Acute Dermal Toxicity	not toxic
Caustic Burning/Skin Irritation	No irritant effect
Serious Eye Damage/Irritation	No irritant effect
Respiratory/Skin Sensitisation	None known
Germ Cell Mutagenicity	Non mutagenic
Carcinogenicity	Non carcinogenic
Reprotoxicity/Teratogenicity	Not toxic
General Information	Product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations. When used and handled according to specifications and GLP, no harmful effects are observed.

12. ECOLOGICAL INFORMATION

Ecotoxicity	
Aquatic Environment	None, insoluble in water (inert polymer).
Persistence and degradability	Persistence and Degradability None
Biodegradability	Product is solid, chemically inert and non-biodegradable. No negative effects are known.
Bioaccumulative potential	Bioaccumulation No evidence for hazardous properties
Mobility in soil	Mobility The substance not water soluble. No evidence for hazardous properties
Results of PBT and vPvB assessment	
Persistent, Bioaccumulative or Toxic	n/a
very Persistent, very Bioaccumulative	n/a
Other adverse effects	
General Information	-

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13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Substance

Waste is non-hazardous and can be disposed of in an incineration plant or approved landfill in accordance to local regulations.

Packaging

Can be re-used or recycled after cleaning.

List of Waste, LOW

07 Wastes from organic chemicals,
07 02 Waste from the MFSU (manufacture, formulation, supply and use) of plastics, synthetic rubber and man-made fibres,
07 02 13 Waste plastic, acrylate co-polymers.
Always check the given waste code according to the actual conditions of manufacturing, formulation or use in your facility.

14. TRANSPORT INFORMATION

UN number -

UN proper shipping name

Land Transport

ADR/GGVSEB -

Land Transport

RID/GGVSEB -

Inland Waterway Transport

ADNR/GGVSEB -

Shipment by Sea

IMDG/GGVSee -

Marine pollutant No

Air Transport

ICAO/IATA

Transport hazard class(es)

Product not classified as hazardous for transport.

Packing group

None

Environmental hazards

Refer to section 14.2, not applicable if unmentioned

Special precautions for user

Refer to section 14.2

Transport in bulk according to the IBC code

N/a

15. REGULATORY INFORMATION

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

National Legislation

Product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations.

Chemical safety assessment

A Chemical Safety Assessment has not been carried out by the supplier.

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16. OTHER INFORMATION

The substance is supplied in a stabilised form. These data are based on our current knowledge and experience, however do not constitute a guarantee for any specific product feature.

The instructions given here are valid only for the substance as supplied, not for derivatives resulting from its use.

This datasheet has been re-written and replaces all previous versions. The information and all further technical advice is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the substances in terms of their safety and handling requirements. The instructions given here are valid only for the product as supplied, not for derivatives resulting from its use. It implies no liability or other legal responsibility on our part. In particular, no warranty, whether expressed or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection of incoming goods.