

# SAFETY DATA SHEET

## according to EC- directive 1907/2006/EC



Product Trade Name: Metrocryl Universal Denture Base Powder

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Revision Date 19/07/2017

Version 3

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

#### 1.1. Product Identifier

Product Name Metrocryl Universal Denture Base Powder

Product Description

Polymer based on Methyl methacrylate and n-Butyl Methacrylate containing peroxide.

This data sheet covers the following grades: Universal, It may be pigmented with small quantities of Iron Oxide, Sodium Aluminosulphosilicate, Titanium Dioxide and Trisodium Salt of 1- (4-Sulphonaphthylazo) -6, 8-Disulphonic Acid - Aluminium Lake. In certain cases Cellulose Acetate Fibres will be present.

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

For use in dental applications.

#### 1.3. 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

#### 1.4. Emergency contacts

Office Hours Metrodent Limited  
+44 1484 461616

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

#### 2.2 Label elements

Not applicable.

#### 2.3 Other hazards

Not classified as PBT or vPvB. Combustible but not readily ignited. May form explosible dust clouds in air. Low toxicity under normal conditions of handling and use.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

#### 3.2 Mixtures

Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below.

According to Regulation (EC) No. 1272/2008 (CLP).

Hazardous Ingredient(s)

Dibenzoyl peroxide

%W/W

<1

EC No.

202-327-6

REACH Registration No.

01-2119511472-50-XXXX

Hazard Class and Category Code(s)/Statement Code (s)

Org. Perox. B	H241
Skin Sens. 1	H317
Eye Irrit. 2	H319
Aquatic Acute 1	H400

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According to Directive 67/548/EEC & Directive 1999/45/EC

Hazardous Ingredient(s)	Dibenzoyl peroxide
%W/W	<1
EC No.	202-327-6
REACH Registration No.	01-2119511472-50-XXXX
Classification	E, O, Xi, N; R3 R7 R36 R43 R50

For full text of H/R phrases see section 16.

#### 4. FIRST AID MEASURES

##### 4.1 Description of first aid measures

Inhalation IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Skin Contact IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention.

Eye Contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing holding eye lids apart

Ingestion Do not induce vomiting. Rinse mouth. Obtain medical attention if ill effects occur.

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

Not applicable.

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

None necessary.

#### 5. FIRE-FIGHTING MEASURES

##### 5.1 Extinguishing media

Suitable Extinguishing Media Water spray, foam, dry powder or CO<sub>2</sub>.

Unsuitable Extinguishing Media Do not use water jet.

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

Combustible but not readily ignited. Combustion or thermal decomposition will evolve toxic, irritant and flammable vapours. This product can form flammable dust clouds at elevated temperatures. The minimum ignition temperature of a dust cloud of a similar polymer has been measured at approximately 480°C (IEC 1241-2-1).

##### 5.3 Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

#### 6. ACCIDENTAL RELEASE MEASURES

##### 6.1 Personal precautions, protective equipment and emergency procedures

Caution - spillages may be slippery.

##### 6.2 Environmental precautions

Avoid release to the environment.

##### 6.3 Methods and material for containment and cleaning up

Collect in containers for disposal using approved dust respirator.

##### 6.4 Reference to other sections

See Section: 8, 13

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### 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Do not eat, drink or smoke at the work place.

Product as supplied: Avoid contact with eyes. Avoid prolonged skin contact. Unlikely to represent a dust hazard under normal handling conditions.

Dental resins are usually processed in conjunction with reactive monomers and this may require the use of a higher level of PPE than that necessary for the polymer itself. Please also see the advice in Sections 8 and 11.

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

Acrylic polymers are supplied in either bags or bulk containers. Keep containers in a clean, cool and dry area away from heat sources. Natural ventilation is adequate.

Storage temperature (°C): Ambient.

Incompatible materials: Polymer contains residual benzoyl peroxide. This may react with oxidising agents, reducing agents, acids, bases and amines leading to decomposition.

#### 7.3 Specific end use(s)

Not intended for thermal processing.

Manufacturer of Dentures

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

Substance	Dibenzoyl peroxide
CAS No.	000094-36-0
LTEL ppm (8Hr TWA)	5
LTEL mg/m <sup>3</sup> (8Hr TWA)	
STEL ppm	
STEL mg/m <sup>3</sup>	
Notes	WEL
Dust (total inhalable dust) mg/m <sup>3</sup>	10
Dust (respirable dust) mg/m <sup>3</sup>	4

Provide adequate ventilation, including appropriate local extraction, to ensure that the occupational exposure limit is not exceeded. Consideration should be given to the work procedures involved and the potential extent of exposures as they may determine whether a higher level of protection is required. The following information is given as general guidance.

#### 8.2 Exposure controls

Appropriate engineering controls

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection: Wear eye/face protection. Safety spectacles/goggles/full face shield.

Skin protection: Wear suitable gloves. Gloves of Butyl rubber are suitable.

Respiratory protection: A suitable dust mask or dust respirator with filter type P-5 or FFP5 (EN143 or EN149) may be appropriate. In the unlikely event of formation of particularly high levels of dust a self contained breathing apparatus may be appropriate.



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### 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Form	Beads
Colour	White or Pink (May contain Cellulose Acetate Fibres)
Odour	Typically methacrylate
pH (Value)	Not applicable.
Melting Range (°C)	150 - 230
Boiling Point (°C)	Not applicable.
Flash Point (°C)	~390
Relative Evaporation Rate (Ether = 1)	Not applicable.
Flammable Limits	Not applicable.
Vapour pressure (Pascal)	<10 at 20°C
Vapour Density (Air=1)	Not applicable.
Solubility (Water)	Negligible.
Solubility (Other)	Not available.
Partition Coefficient (n-Octanol/water)	Not applicable.
Auto Ignition Temperature (°C)	~465
Viscosity (mPa. s)	Not available.
Explosive properties	Weakly to moderately explosive.
Oxidising Properties	Not applicable.
Density (g/ml)	1.1 - 1.18 g/cm <sup>3</sup>
Bulk Density (g/ml)	0.60 - 0.70

#### 9.2. Other information

ST Class

### 10. STABILITY AND REACTIVITY

10.1 Reactivity	Non-reactive material.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	None known.
10.4 Conditions to avoid	Avoid dust generation.
10.5 Incompatible materials	Polymer contains residual benzoyl peroxide. This may react with oxidising agents, reducing agents, acids, bases and amines leading to decomposition.
10.6 Hazardous decomposition product(s)	Methyl methacrylate n-Butyl Methacrylate, Dibenzoyl peroxide, Carbon dioxide, Carbon monoxide.

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### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

Acute toxicity

Ingestion

Inhalation

Skin Contact

Low oral toxicity.

Unlikely to be hazardous by inhalation.

Unlikely to cause skin irritation. Contains greater than 0.1% residual (Methyl methacrylate, Dibenzoyl peroxide). During normal handling this will not constitute a hazard. If the polymer matrix is destroyed e.g. when the product is dissolved in organic solvent, chemical residues will be released from the polymer matrix. Under these conditions, they may produce an allergic reaction in persons already sensitised.

Eye Contact

Dust may cause irritation.

### 12. ECOLOGICAL INFORMATION

12.1 Toxicity

The product is predicted to have low toxicity to aquatic organisms.

12.2 Persistence and degradability

The product is non-biodegradable in soil. There is no evidence of degradation in soil and water.

12.3 Bioaccumulative potential

The product has low potential for bioaccumulation.

12.4 Mobility in soil

The product is predicted to have low mobility in soil.

12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

12.6 Other adverse effects

None known.

### 13. DISPOSAL CONSIDERATIONS

The waste is considered to be non hazardous. Clean scrap may be reprocessed. Ensure that all packaging is disposed of safely.

13.1 Waste treatment methods

May be disposed of by landfill in accordance with local regulations. Incineration may be used to recover energy value. Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

### 14. TRANSPORT INFORMATION

Not Classified as Dangerous for Transport.

14.1 UN number

Not applicable.

14.2 UN Proper Shipping Name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to

Annex II of MARPOL73/78 and the IBC Code

Not applicable.

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### 15. REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
Directives 67/548/EEC and 1999/45/EC
- 15.2 Chemical Safety Assessment  
A Chemical Safety Assessment has not been carried out for this substance/mixture. Not applicable.

### 16. OTHER INFORMATION

This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 453/2010.

Date of preparation: 19 JULY 2017

Inventory Status

European Union

To the best of our knowledge all chemicals in this product comply with REACH regulations.

Note Not all of the following are necessarily contained in this Safety Data Sheet:

IOELV: Indicative Occupational Exposure Limit Value

WEL: Workplace Exposure Limit (UK HSE EH40)

Bmgv: Biological Monitoring Guidance Value

Sen: Capable of causing respiratory sensitisation

Sk: Can be absorbed through skin

Carc: Capable of causing cancer and/or heritable genetic damage

CHAN: Chemical Hazard Alert Notice

COM: The company aims to control exposure in its workplace to this limit

LTEL: Long Term Exposure Limit

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

STOT SE: Specific Target Organ Toxicity - Single Exposure

Repr.: Reproductive toxicity

Aquatic acute/chronic: Hazardous to the aquatic environment

Full text of H/P/R phrases H241: Heating may cause a fire or explosion.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H400: Very toxic to aquatic life.

R3: Extreme risk of explosion by shock, friction, fire or other sources of ignition.

R7: May cause fire.

R36: Irritating to eyes.

R43: May cause sensitization by skin contact.

R50: Very toxic to aquatic organisms.

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.