SAFETY DATA SHEET
according to EC- directive 1907/2006/EC

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

1.1. Product Identifier

Product Name	Metrocryl HI (High Impact) Denture Base Powder
Product Description	Rubber modified methacrylate polymer

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

Identified use(s) Manufacture of dental and medical products.

Uses advised against None known.

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@metreodent.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

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)	Hazard Statement Code(s)
Org. Perox. B	H241
Skin Sens. 1	H317
Aquatic Acute 1	H319
Hazard statement Code(s)	H400

For full text of H 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.
Ingestion IF SWALLOWED: rinse mouth. Do NOT induce vomiting. 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 CO2.
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

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 f rom 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)

Manufacture of dentures.

Not intended for thermal processing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Substance	CAS No.	LTEL ppm (8Hr TWA)	LTEL mg/m^3 (8Hr TWA)	STEL ppm	STEL mg/m^3	Notes
Dibenzoyl peroxide	000094-36-0		5			WEL
Aluminium oxides	001344-28-1					
Total inhalable dust			10			
Respirable dust			4			
WEL						
Dust (total inhalable dust)			10			
(respirable dust)			4			

8.2 Exposure controls

Appropriate engineering controls

Do not eat, drink or smoke at the work place. 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 exposure as they may determine whether a higher level of protection is required. The following information is given as general guidance.

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

Eye/face protection

Wear eye/face protection. Eye protection with side protection (EN 166)

Skin protection

Wear suitable gloves. Suitable materials: Butyl; EN 374. Suitability of gloves should be confirmed with glove manufacturer. Change gloves, if contamination occurs or duration of activity exceeds breakthrough time. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Respiratory protection

A suitable dust mask or dust respirator with filter type P3 or FFP3 (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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	Powder.
Colour.	White/Pink
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)	Not applicable.
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 explosible.
Oxidising Properties	Not applicable.
Density (g/ml)	1.1 - 1.18 g/cm3
Bulk Density (g/ml)	0.60 - 0.75

9.2 Other information

St Class 1

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, Dibenzoyl peroxide, Carbon dioxide, Carbon monoxide.

11.TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	
Ingestion	Low oral toxicity.
Inhalation	Unlikely to be hazardous by inhalation.
Skin Contact	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. Certain packages are returnable. Please consult your local office for further details. 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 MARPOL 73/78 and the IBC Code	Not applicable.

15. REGULATORY INFORMATION

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

Regulation (EC) No 1272/2008 (Classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006).

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this substance/mixture. Appropriate information from exposure scenarios from component substances relevant to uses of this mixture have been incorporated into the core sections (1-16) of this safety data sheet.

16. OTHER INFORMATION

This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 453/2010.
Date of preparation: 15 - August - 2015
The following sections contain revisions or new statements: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

Inventory Status

European Union	To the best of our knowledge all chemicals in this product comply with REACH regulations.
United States (TSCA)	Listed in TSCA
Canada (DSL/NDSL)	Listed in DSL
Japan (ENCS)	Not listed in ENCS
Philippines (PICCS)	Listed in PICCS
Australia (AICS)	Listed in AICS
South Korea (KECI)	Listed in KECI
China (IECSC)	Listed in IECSC
Taiwan (TCSI)	Not listed in TCSI
New Zealand (NZIoC)	Listed in NZIoC

Compliance with other Regulatory Chemical Inventories cannot be assumed, please contact supplier for further information.

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 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.

IMPORTANT: USE IN THE MANUFACTURE OF MEDICAL DEVICES AND RELATED PRODUCTS.

Lucite International has performed no clinical testing on the use of this product in any medical application. Lucite International has no data to

support the use of this product in any medical application. This product has been manufactured to a specification according to high standards

of manufacturing practice. Lucite International supplies this product on the specific understanding that it is the sole responsibility of the medical

device manufacturer to ensure that the medical device is both safe and fit for the intended purpose and that this product is suitable for use in its manufacture.

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.

END OF SAFETY DATA SHEET