1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name	Vertex Acrylic Powder
Product description	Polymer powder based on Poly Methyl Methacrylate
Alternative names	Vertex Acrylic Stain, Vertex Castapress, Vertex Castavaria, Vertex Castaquick, Vertex Castavite, Vertex Implacryl, Vertex Implacryl Cold, Vertex Self Curing, Vertex Self Curing Quickset, Vertex Orthoplast, Vertex Rapid Simplified, Vertex Teeth Coloured Acrylic, TCB, Teeth Material, DB20, Repair material B, Repair material C, Repair material D, Pour material B, Pour material D, Hot Cure 20 Minutes C, Hot Cure 20 Minutes D, Hot Cure Material C, Hot Cure Material D, BasiQ20, Castdon, Premium Super-20 Denture, Pour D CV, Platinum Hi, High Impact D, Ortho D, TM Self Cure Complete D, Jet Denture Repair, J-Cryl+, J-Cryl+ Rapid Repair.

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

Identified use	Professional: End use of mixtures containing for manufacturing of dental prosthesis, expanding or repairing dental prosthesis, manufacturing of dental regulators and individually formed impression trays.
Uses advised against	Mixtures containing unreacted liquid monomer intended to come into contact with skin or nails.

Refer to Exposure Scenario Annex for further details.

1.3 Details of the supplier of the safety data sheet

Vertex-Dental B.V.
P.O. Box 10
3700 AA Zeist
The Netherlands
info@vertex-dental.com

Emergency telephone number: +31 30 6976749
(only available during office hours)

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation (EG) Nr. 1272/2008 [CLP].
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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
This product is a mixture.

3.2 Mixtures
The product does not meet the criteria for classification in any hazard class. Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below. Note that the concentration of hazardous goods in the mixture are too low to give the mixture some of their specific hazards.

According to Regulation (EG) Nr. 1272/2008 [CLP].

Hazardous ingredient(s)	%W/W	EINECS No.	Hazard Class and Category Code(s)	Hazard statement Code(s)
Dibenzoyl peroxide	< 1	202-327-6	Org. Perox. B Skin Sens. 1 Eye Irrit. 2 Aquatic Acute. 1	H241 H317 H319 H400
Barbituric acid	< 1	276-940-2	Skin Irrit. 2 Eye Irrit. 2 STOT SE. 3	H315 H319 H335
Methyl Metacrylate	< 1	201-297-1	Flam. Liq. 2 Skin Irrit. 2 Skin Sens. 1 STOT SE. 3	H225 H315 H317 H335

For full text of H phrases see section 16.

SECTION 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 (or hair): 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	Do not induce vomiting. Rinse mouth. Obtain medical attention if ill effect occur.

4.2 Most important symptoms and effects, both acute and delayed
Not applicable.

4.3 Indication of the immediate medical attention and special treatment needed
None necessary.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	In case of fire, use water spray, foam, dry powder or CO2 for extinction
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 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.

SECTION 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 incontainers for disposal using approved dust respirator.

6.4 Reference to other sections

See section 8, 13.

SECTION 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 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: 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.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

In each case, the currently valid national exposure limit values for Dibenzoyl Peroxide, Methyl Methacrylate and dust must be observed.

Substance	EC No.	LTEL mg/m^3 (8 h TWA)	Notes
Dibenzoyl Peroxide	202-327-6	5	WEL
Methylmethacrylat	201-297-1	208	WEL
Dust (inhalable dust) Dust (respirable dust)		10 4	WEL WEL

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. Safety spectacles/goggles/full face shield.
Skin protection	Wear suitable gloves. Butyl and nitrile rubber gloves are suitable. Later surgical gloves offer little protection.
Respiratory protection	A suitable dust mask or dust respirator with filter type P3 or FFP3 (EN143 or EN 149) may be appropriate. In the unlikely event of formation of particularly high levels of dust a self-contained breathing apparatus may be appropriate.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form	Fine beads
Colour	Coloured
Odour	Typically methacrylate
pH	Not applicable
Melting point	150 - 230°C
Boiling point	Not applicable
Flash point	≈ 390°C
Flammable Limits (lower)	Not applicable
Flammable Limits (Upper)	Not applicable
Vapour pressure	Not applicable
Solubility (Water)	Negligible
Solubility (Other)	Not available
Auto ignition temperature	≈ 465°C
Explosive properties	Weakly to moderately explosible
Oxidising properties	Not applicable
Relative density	1,1 – 1,18 g/cm3
Bulk Density	0,60 – 0,70 g/ml

9.2 Other information

None

SECTION 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 Unverträgliche Materialien

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.

SECTION 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 less than 1,0% residual (Methyl Methacrylate, Dibenzoyl peroxide, Barbituric acid). 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 sensitized.
Eye Contact	Dust may cause irritation.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
The product is predicted to have low toxicity 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 products 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.

SECTION 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.

SECTION 14: TRANSPORT INFORMATION

14.1 UN-Nummer
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.

SECTION 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 107/2006.
Richtlinie 2009/161/EU (dritte Liste von Arbeitsplatz-Richtgrenzwerten in Durchführung der Richtlinie 98/24/EG des Rates und zur Änderung der Richtlinie 2000/39/EG).

15.2 Chemical Safety Assessment
A Chemical Safety Assessment has not been carried out for this substance/mixture. Not applicable.

SECTION 16: OTHER INFORMATION

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

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

LEGENDE

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

IOELV:	Indicative Occupational Exposure Limit Value.
WEL:	Workplace Exposure Limit.
Bmgv:	Biological Monitoring Guidance Value.
Sen:	Capable of causing respiratory sensitization.
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.
Aquatisch akut/chronisch:	Hazardous to the aquatic environment.

Full text of H phrases (not the classification of the mixture)

Dibenzoyl Peroxide
H241 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

1-benzyl-5-phenylbarbituric acid
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Metyl Metacrylate
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

For full list of P phrases of each component, please refer to the SDS of the individual components.

This is the end of SDS ID: M-PM-2018-05-UK