centri-base

Pourable (Cold Cure) Process Instructions Type 1 Class 1

1 Application

The fabrication of complete and partial removable dentures, associated appliances and repairs, manufactured by a qualified dental professional.

2 Available shades

Translucent, Light Pink, Natural, Clear. All colours available in veined

3 Compositions

A Cold curing acrylic polymer and monomer Main Components Powder: Polymethyl methacrylate, Non-cadmium pigments Liquid: Methyl methacrylate, EGDM, DMPT

4 User advice

This product contains methyl methacrylate monomer and can cause skin allergies especially with sensitive patients. Patients with a history of resin allergy or if allergic reactions are observed, the product should be removed immediately and an alternative material used.

It should be noted that some makes of teeth require mechanical undercuts or processing to obtain bonding to the denture base material, it is recommended that the acrylic tooth is roughened and a mechanical retention be created before moulding the pourable acrylic denture base. Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State where the user and/or patient is established.

Regular dental check-ups are recommended to keep gums and natural teeth healthy, the denture should be checked for normal wear or change, but should give many years of life if treated well.

5 Cast preparation

Casts should be vacuum mixed to prevent air inclusions and to ensure a smooth surface. The cast sides should be trimmed to 90° from the base to facilitate removal from the mould later. The cast land area should be a minimum of 5mm wide to allow positive location within the mould. Once teeth have been set-up, the wax periphery should be sealed down in the usual way. If processing in reversible hydrocolloid - the cast should be well saturated in water prior to pouring the hydrocolloid.

6 Processing preparation

Reversible Hydrocolloid – Place cast in pouring flask and pour in reversible hydrocolloid. Once set, the cast can be carefully removed and 3 channels cut aligning the denture periphery with the pour/air holes in the flask. A minimum diameter of 6mm is recommended for the pour channel (centre). <u>IMPORTANT</u> – ensure that the wax used for the set-up can withstand the **working** temperature of the chosen reversible hydrocolloid.

Duplicating silicone – the denture should have 3 'sprues' attached to its periphery which line up with the pour/air holes in the flask. A minimum diameter of 6mm is recommended for the pour channel (centre). These can be made of rolled wax. Once the cast has been carefully removed from its mould, the teeth and wax can be removed in the usual way and cleaned of all wax residues. Reversible Hydrocolloid – Saturate the cast again and paint with plaster separator/insulator.

Duplicating silicone – Paint the cast with plaster separator/ insulator.

Replace the teeth into the mould taking care to ensure their correct location & firm position (We would recommend the acrylic tooth is roughened/mechanical retention added prior to this stage).

Return the cast to its mould within the flask.

7 Mixing

Thoroughly mix a ratio of 10 g of polymer to 5 g of liquid of the chosen shade of polymer to liquid, the resulting mix should be very thin.

8 Pouring

The pour phase will last between 3 to 4 minutes after mixing (23°C). Tip - A thin layer of petroleum jelly applied to the plastic pour holes will prevent spilled acrylic sticking. Pour the mixed acrylic into the centre channel of the flask in a slow, steady stream, cease when the acrylic fills all three channels. Gently rock the flask to ensure that all air has escaped.

9 Polymerization: Pressure Curing Unit

Place the flask in the curing unit with the pour holes uppermost ensuring that the water level is above the highest point of the

denture. Do not submerge the pour holes or allow water to

enter them. Polymerization will occur after 20 minutes with a water temperature of 40 to 50 °C at 4 to 6 bar pressure. Note tests at 2 bar in certain units have found to be sufficient, although we would recommend the higher pressure.

9 Polymerization: Hydroflask

When the acrylic has formed a skin, place the flask in the hydroflask with the pour holes uppermost. Polymerization will occur after 20 minutes with a water temperature of 40 to 50 °C at 4 to 6 bar pressure. Note tests at 2 bar in certain units have found to be sufficient, although we would recommend the higher pressure.

10 Finishing

Allow the flask to bench cool, remove the mould from the flask and then remove the denture from the mould. Remove the sprues, then trim and lightly polish the denture.

11 Repairing

This can be carried out using the same material and process, or by using centri-base Rapid Repair Cold Curing Material.

12 Storage

Do not store above 25°C. Store away from direct sunlight. Close containers immediately after use. Keep out of reach of children.

Warning for liquid component advice Please see overleaf.

13 Cleaning

Generally over the counter cleaners and disinfectants are suitable but manufacturer's instructions must be followed and hot water or heat must not be used.

WHW recommends centri after care systems, please contact for further details.

SAFETY PRECAUTIONS

DENTAL METHACRYLATE MONOMERS

Most important adverse effects

Highly flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. May cause respiratory irritation.

STORAGE

Store in a cool place away from direct sunlight, naked flames and sparks.

Close all containers immediately after use and are stored in a suitable flammable cabinet when not in use.

Prevent the build up of electrostatic charge in the immediate area, ensure lighting and electrical equipment are not a source if ignition.

HANDLING

WHW polymer solutions containing flammable solvents and should be handled in a well-ventilated non-smoking area, away from heat and naked flames.

Contact with skin and eyes should be avoided and suitable protective clothing should be worn, i.e. overalls, gloves and goggles. In the event of contact wash immediately with copious amounts of water.

A spillage of solution should be cleaned up with sand and earth.

In the event of fire use sand, earth, carbon dioxide or powdered extinguisher. **Never use water**

The flash point of Methacrylate Monomer is 10°C. Dispose of waste and residues in accordance with local authority requirements

Waste may be disposed of by landfill in accordance with local regulations

DENTAL BEAD POLYMERS

STORAGE

Store in a cool dry place.

HANDLING

Although these products present no toxic hazard care must be taken when handling to avoid the possibility of dust explosion occurring.

Suitable protective clothing should be worn, i.e. Overalls, and dust mask if dust is created.

Electrical fittings in the immediate area should be dust proof.

Where exhaust systems are used they should be equipped with explosion relief panels and runs of ducting should be as short and direct as possible.

For more detailed information please refer to the appropriate Manufacturers Safety Data Sheet