

## ACETAL DENTAL®

## Tecnology System Manufacturing INSTRUCTIONS FOR USE

MANUFACTURER: Pressing Dental S.r.l. Via Onesto Scavino, 4 - 47891 Falciano (Repubblica di San Marino)

Italian representative for the European Comunity: Monticelli Giovanni Alessandro Via E. Romagna, 233 47841 Cattolica (RN) info@pressing-dental.com

CONTENT: Acetal resin (POM) for pressure - injection indicated for the production of dental prostheses

BATCH: Check on the package

STORING: To be used by the expiry date indicated on the container.

Store the product in its package, do not keep the product exposed to direct sunlight, keep the package away from heat sources, in a dry place.

### **USE PROVIDED FOR:**

Material to be used in the pressure - injection of particulars for dentistry. For ex: Esthetical hooks on skeleton prosthesis, partial prostheses, displaceable pons, post - surgical space keepers, provisional pons, support structures for provisional, stump pins, implant stumps, splint, limitations and other prosthetic solutions.

### SPECIFIC INSTRUCTIONS FOR USE:

The product T.S.M. Acetal Dental® can be used with the specific equipment manufactured by the company Pressing Dental s.r.l.

Processing specifications with Pressing equipment:

Processing specifications provide for the following variable data:

Melting point: 220 °C Melting time: 20 min Heating time after injection: from 2 min to 5 min

Cooling time: from 20 min to 40 min Injection pressure: 4 bar

These parameters vary according to the dimensions of the prosthetic item to be manufactured, for further information, ask for the specific technical tables.

- Use of the material on equipment not manufactured by the company Pressing:

Note: If the amount of product to pressure-inject is lower than the 3 high disks (2 cm each), in order to ensure the correct melting of material it is necessary to insert 3 teflon caps after the material. Such procedure allows for a more even melting of the product, in that it is closer to the oven's thermal centre.

if will be used Ø 25.4 tubes the melòting point must be 225 °C and the melting time 25 min (with Pressing Dentals Machines)

The melting point must be of 220°C and the melting time must not exceed 20 minutes, ± 2°C for other parameters abide by the instructions provided by the manufacturer of the equipment; in particular for pressure - injection equipment with compression of the cartridge the indicative injection pressure can be of 6/8 atm.

The user of the material (a dental mechanic), in order to know its correct use, must attend a course (theory and practice) at the manufacturer's premises, or at authorized sellers. During such a training course the user gets to know all the current processing techniques (as not all the applications are then schematized in the technical tables) for the correct use, as well as on the advantages and the limits of the product; in addition he is trained on the specific use of the machines necessary for its production. During the course the user is given all the necessary information in order to use the product in combination with other devices. In case it is needed to combine the product T.M.S. Acetal Dental<sup>® with</sup> metal parts, since there is no adherence between the materials, it is necessary to create mechanic retentions. In case the product T.M.S. Acetal Dental® has to be combined to particulars made of acrylic resins, it is possible to obtain an adequate adherence by using the product Acecril. See processing times.

## RECOMMENDED COLOUR SCALE: T.S.M.. Acetal Dental®

### SUPERFICIAL COLOURING TECHNIQUE:

Carry out a mild shot blasting, at 2 bar, using 50-micron aluminium dioxide. - Remove shot blasting residue by vapour. - Use a primer compound of ethyl Acetate to favour adherence (for ex: Lux Clea). - Use a brush to lay a thin and even coat of photo-polymerising lake (for ex: Acelux). - Go on with the polymerization following the modes indicated by the manufacturer. - Mix the pigments to obtain the desired colour with the same lake. - Lay the pigmented lake on the surface and photo- polymerize it.- Once the colouring stage is over, lay another protective coat and photo – polymerize, always following the procedure indicated by the manufacturer.

N.B.: The colouring made with photo - polymerizing lakes may entail the adherence of bacterial plaque. In addition the photo - polymerizing lake may get wasted with time, leaving

### FINISHING AND POLISHING:

- Use non-aggressive polishing pastes (for ex: Universal Polish). - Use only low - revolution cotton brushes to prevent the material from overheating (for ex ample a handle brush with a 20 mm diameter on a 20.000/40.000 - revolution handle, polish at 5/10 second intervals exerting a slight pressure; follow the same procedure with 80 mm - diameter brushes with 2800 revolution / min equipment). See the instructions for use of equipment J-100,J-200 e Actio, You and Me. See technical tables for processing.

The product must only be cleaned with water and with the use of non-abrasive materials, do not use ultrasound equipment with acids that can modify their requisites.

In case of use of such material for the manufacturing of bite or provisional pons, the possible superficial abrasion has to be considered, which is due to contact with the antagonists. The material may undergo colour changes in the following cases:

- If the material remains in the melter longer than the time indicated; If the material is reused, though in small quantity;
- If it remains in contact with carotene for long periods of time; - If a good polishing is not carried out;
- If it is pigmented superficially with photosensitive lakes, which favour the adherence of bacterial plaque and can get wasted with time, leaving under them a non-smooth surface.

## CAUTIONS:

The product does not resist to chemical agents with oxidant effect, nor to strong acids (pH<4). During the finish use an aspirator and/or a mask to avoid breathing the powder. During the finish and polishing stages, take care not to overheat the product, being this a thermoplastic material, an undesired change of the prosthetic item and a liberation of irritant gases. In case of manufacturing of small dental appliances take care not to leave sharp parts (in the case of hooks), and that the dimensions of the finished appliance are not such as to favour its swallowing, if it is a mobile appliance. Attention: the material is not visible with x-rays. Do not reuse the product. Do not exceed the maximum temperature of 220°C. 225 °C. If there is a strong smell of formaldehyde during the molding, check the set melting point and ask for assistance, if it is necessary. Do not exceed the melting time (20 minutes) (Maxi Tube 25 min.), because there could be mechanical changes of the material, with consequences on the final prosthetic item. In case of manufacturing limiting parts (hooks, connections, etc.) avoid reactivating the material already formed by using heat sources. Do not contaminate the product during the pressure - injection stage. Do not mix the product with other materials. In case of allergic reactions to the material, immediately discontinue the application and contact a doctor.

The product can be used for long time application (5 Years)

## RISK PHRASES INDICATED ON THE PACKAGE:

Formaldehyde: Formaldehyde (vapors) develops in the event of thermal decomposition of the product

H301 Acute oral toxicity - categ.3 H311Acute dermal toxicity - categ.3 H331 Acute inhalation toxicity - categ.3 H314 Skin corrosion / irritation - categ. 1B H317 Skin sensitization - categ. 1 H351 Carcinogenicity - category.2

Harmful: possibility of irreversible effects by inhalation (in case of decomposition of the product for the gases that stem from it); -It may provoke sensitization by inhalation and contact with the skin (with reference to the powder during the finishing of items); - It provokes burns (with reference to the material in the melted state); - Irritant for the eyes and the airways (with reference to the powder during the finishing stage of the items and to the gases in the melted state).

General advice P 101 If a doctor is consulted, keep the container, the instructions for use or the label available.

Caution / prevention advice P 202 Do not handle before reading and understanding all warnings P 201 Keep away from heat / sparks / open flames Hot surfaces / No smoking P 206 Avoid breathing dust / fumes / gases / mist vapors aerosols P 235 Store in a cool place P 270 Do not eat, drink or smoke during use

P 281 Use the personal protective equipment required

P 234 + P410 Keep in a cool place protect from sunlight Cautionary advice / Reaction

P312 Contact a poison control center or a doctor if you feel unwell P311 + P312 In case of ingestion accompanied by malaise: contact a poison control center or contact a doctor P332 + P313 In case of skin irritation: consult a doctor

P337 + P331 If eye irritation persists: consult a doctor P410 + P412 Protect from sunlight Do not expose to temperatures exceeding 50  $^{\circ}$  C / 122 F

(GB)

Conservation advice EUH 401 - To avoid risks to human health and the environment, follow the instructions for use.

### INFORMATION FOR THE FINAL USER:

When delivering the finished device, the dental mechanic must give the user at least the following information:

- Do not clean the prosthesis with abrasive products, or with products meant for the cleaning of acrylic resin prostheses, or metal prostheses; only use products for the oral hygiene.
- Wash the prostheses with cold water only, at a temperature lower than  $42^{\circ}\text{C}.$ - A colour change was noticed in case of a contact with carotene
- Normal oral hygiene. Non radio opaque device. Waste of the material is due to bruxism and to the contact with abnormal antagonists. Flammable device (synthetic resin).

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  Normal oral hygiene.
  Non radio opaque device.
  Waste of the material is due to bruxism and to the contact with abnormal antagonists.
  Flammable device (synthetic resin).

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