



# **INSTRUCTIONS**

#### **GENERAL DESCRIPTION**

DP20 heat cure denture base resin is made with cross-linked acrylic polymer. It is reinforced to increase its impact resistance and its flexibility. It does not contain cadmium to reduce the risk of allergic reactions. DP20 heat cure resin has a short dough time combined with an extra-long working time. <a href="NOTE">NOTE</a>: DP20 POWDER IS DESIGNED TO WORK IN CONJUNCTION WITH DENPLUS 20 MINUTES LIQUID IN ORDER TO OBTAIN PERFECT DENTURES BY THE FAST CURING PROCESS. DO NOT USE A DIFFERENT LIQUID FOR THE 20 MIN BOILING.

#### **CONTRAINDICATIONS**

DP20 resin is contraindicated for patients and users with a history of allergic reaction to methyl methacrylate monomer.

#### WARNINGS

**20 MINUTES liquid** contains polymerizable monomers which may cause skin sensitization (redness, irritation) or other allergic reactions in susceptible persons. Avoid vapor inhalation and do not swallow.

#### **ADVERSE REACTIONS**

Allergic contact dermatitis and other allergic reactions may occur in susceptible individuals. Residual monomer in fully cured materials can be minimized by soaking the cured prosthesis in warm water for several days.

Fines particulates will be generated when grinding cured acrylic resins. Eye, skin and respiratory irritation may occur if appropriate protective equipment are not used.

#### **HEALTH AND SAFETY INFORMATION**

Please refer to the Safety Data Sheets (SDS) for information on any hazardous properties before handling. As the liquid is not miscible with water, it should not be eliminated via the municipal sewerage system.

Table 1

| Powder : Liquid ratio            | 3.3 : 1                             |
|----------------------------------|-------------------------------------|
| Ratio (volume)                   | 33 cc : 10 ml or 30 cc : 9 ml       |
| Gel time                         | 7 ± 1 minutes                       |
| Snap time                        | 11 ± 1 minutes                      |
| Working time                     | at least 45 minutes                 |
| Weight equivalent                | 34  cc = 23.4  g                    |
| Processing methods:              |                                     |
| 20 min boil                      | 20min. @ 100 °C (212 °F)            |
|                                  |                                     |
| <ul> <li>Short curing</li> </ul> | 1 ½ h @ 73 °C (163 °F)              |
|                                  | then ½ h @ 100 °C (212 °F)          |
| Cooling methods:                 |                                     |
| Fast cooling:                    | 30 min. bench then 20 min. in water |
| Recommended cooling:             | bench, to 25 °C (77 °F)             |

#### **PREPARATION**

A wax denture is fabricated in the usual manner. Apply Separa-Plus liquid to all gypsum surfaces. Allow the liquid to dry through before the resin is packed.

#### **MIXING OF POWDER AND LIQUID**

Shake powder well. Use the powder: liquid ratio specified in table 1. DO NOT MANIPULATE LIQUID NEAR AN OPEN FLAME. Pour the required amount of liquid into a mixing jar, then add the recommended portion of powder. Using a clean metal spatula, mix thoroughly for about 15 seconds to obtain a homogeneous mixture. The resin requires approximately one minute to completely absorb the monomer. Cover the jar to prevent drying prior to packing.

DP20 resin requires less monomer by design. DO NOT ADD LIQUID; EXCESS MONOMER SUBSTANTIALLY INCREASES THE TIME IT TAKES FOR THE ACRYLIC TO SET AND COULD GENERATE POROSITY.

The following table provides an indication for various denture sizes:

Table 2

| CASE    | Ratio 3.4 :1 |        |
|---------|--------------|--------|
|         | Powder       | Liquid |
| Large   | 40 cc        | 12 ml  |
| Average | 30 cc        | 9 ml   |
| Partial | 20 cc        | 6 ml   |

#### DOUGH TIME AND WORKING TIME

Dough consistency should be reached in about 7 minutes at 23  $^{\circ}$ C. At this point the dough is no longer tacky and can be worked with hands into a homogeneous, putty-like mass. The recommended packing stage is when the dough reaches the "snap point", i.e., when stretched, the dough breaks cleanly with a clear, popping sound.

# **PROCESSING METHODS**

For 20 min boiling, immerse the flask in boiling water. Bring the water back to boil and continue for 20 minutes.

For the short curing, it is recommended to cure the denture at 73 °C (163 °F) for 1½ hours and then 30 minutes at 100 °C (212 °F).

Cool the flask before deflasking (see table 1).

## **SHIPPING AND CARE**

It is recommended to deliver the finished denture in a wet environment. Prosthesis must be cleaned regularly to reduce bacterial contamination.

# **REPAIR AND SOFT BASE**

It is recommended to use DP-Repair materials that are available in the same shades as this heat cure resin.

To make a soft base, it is recommended to initiate the curing of the resin by packing it in a slightly warm flask. Maintain under pressure for about 1 hour to harden the resin. Afterwards, apply soft base according to manufacturer's instructions.

### To order or for information:

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