



# **INSTRUCTIONS**

#### **GENERAL DESCRIPTION**

DP97 heat cure denture base resin made with cross-linked acrylic polymer. It does not contain cadmium to reduce the risk of allergic reactions and a multi-fibres process is used to produce a natural appearance. DP97 heat cure resin has an extra-long working time to allow the packing of many cases simultaneously with a consistent quality. DP97 resin must be used with DP-HC liquid.

#### CONTRAINDICATIONS

DP97 resin is contraindicated for patients and users with a history of allergic reaction to methyl methacrylate monomer.

# **WARNINGS**

**DP-HC 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.

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

Table 1	
Powder : Liquid ratio:	3.3 : 1
Ratio (volume)	33 cc : 10 ml or 30 cc : 9 ml
Gel time	11 ± 1 minutes
Snap time	16 ± 1 minutes
Working time	at least 60 minutes

Weight equivalent: 33 cc = 23.4 g

# Processing methods:

9 h @ 73 °C (163 °F)
1 ½ h @ 73 °C (163 °F)
then ½ h @ 100 °C (212 °F)
6 h @ 70 °C (158 °F)
then 2h @ 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.

DP97 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 sizes of dentures.

Table 2

CASE	Quantity	
	Powder	Liquid
Large	40 cc	12 ml
Average	30 cc	9 ml
Partial	20 cc	6 ml

### DOUGH TIME AND WORKING TIME

Dough consistency is reached in about 11 minutes at 23 °C (73°F). At this point the dough is no longer tacky and can be worked 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. <u>This recommendation is especially important when making thicker dentures.</u>

# **CHOICE OF PROCESSING METHOD**

The three methods lead to similar results.

**Slow Curing**: Immerse the flask in water at 73 °C (163 °F) and maintain this temperature for at least 9 hours.

**Short Curing**: Immerse the flask in water at 73 °C (163 °F) and maintain this temperature for 1½ hours. Bring water to boil and then keep boiling for 30 minutes.

Alternate Curing: Immerse the flask in water at 70 °C (158 °F) and maintain this temperature for 6 hours. Then raise the temperature to boil and maintain for 2 hours. This method greatly reduces residual monomer.

Cool the flask before deflasking (see table 1).

Trim and polish in the usual manner.

# **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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