

# ACRYCON AC

## Acrylic Powder for Dental Use

ACRYCON AC is a poly methyl methacrylate powder for dental usage made by Mitsubishi Chemical Corporation.

General procedures to make artificial teeth or teeth bridge with ACRYCON:

1. Color ACRYCON with pigments as needed.
2. Mix ACRYCON with methyl methacrylate monomer.  
(Ideal ratio is about 40~30% of monomer to 60~70% of ACRYCON.)
3. Continually stir the mixture until the slurried powder becomes a paste.
4. Carefully fill the cavity of plaster, taking care of the volume. Too much volume over cavity or too little volume should be avoided.
5. Add pressure to cavity by hand press machine or similar device.
6. Submerge the cavity into hot water for around 3—5 hours for polymerization to occur.
7. Remove the moldings from the cavity.

Material Properties	
Product	A C
Application	Dental Use
[ $\eta$ ]	0.40 - 0.44
Molecular Weight Distribution (ref. data)	
Mn	480*10 <sup>3</sup>
Mw	1370*10 <sup>3</sup>
Mw/Mn	2.86
Particle Size Distribution	
60 mesh on (%)	0
80 mesh on (%)	2
120 mesh on (%)	24
150 mesh on (%)	28
200 mesh on (%)	36
250 mesh on (%)	4
300 mesh on (%)	4
300 mesh pass (%)	2
Average Particle Size (mm)	0.109
Moisture Content (%) After drying for 3 hours at 80 °C	0.8 ~ 1.2
Paste preparation (Resin/Monomer Ratio - 2:1)	
1. Time to make paste after mixing	17 min.
2. Preparation time after making paste	10 min.