

67-16 Axcent 15-Minute Acrylic (Project 01-61) (12/02)



Axcent 15-Minute is a new heat-cured denture resin acrylic marketed by Garreco, Inc. that is advertised to fully cure in 15 minutes. The manufacturer further claims that Axcent 15-Minute cures without porosity, and has strength comparable to most premium denture base acrylics on the market today. It reportedly can be used for any denture base application as well as other indications such as nightguards. For denture processing procedures, Axcent 15-Minute uses conventional compression-molded processing techniques familiar to most laboratory technicians and usually does not require additional equipment. The product is mixed at a ratio of 1 part monomer (liquid) to 3 parts polymer (powder) for 1 minute. The manufacturer states the pre-pack dough time (working time) is 3-5 minutes and that trial

packing steps can be done if necessary. Following final closure of the flask, the acrylic is cured by flask placement directly into boiling water for 15 minutes, removed, and then bench cooled. After suitable cooling, Axcent 15-Minute is deflasked and finished using the usual finishing and polishing techniques. This product is available in seven denture base shades: light fiber, dark fiber, purple fiber, light characterized, A-99 (matches Lucitone 199®), plain pink, and clear.

Manufacturer:

Garreco Incorporated
P.O. Box 1258
Heber Springs, AR 72543
(800) 334-1443
(501) 362-6261
(501) 362-2264 FAX
www.garreco.com

Suggested Retail Price:

- (4) - 1 lb Axcent 15-Minute powder - \$74.20
- (4) - 5 lb Axcent 15-Minute powder - \$350.90
- (1) - 20 lb Axcent 15-Minute powder - \$348.20
- (4) - 8 oz Axcent #2 liquid - \$37.50
- (4) - 1 qt Axcent #2 liquid - \$79.50

Government Price:

- (4) - 1 lb Axcent 15-Minute powder - \$49.70
- (4) - 5 lb Axcent 15-Minute powder - \$235.20
- (1) - 20 lb container Axcent 15-Minute powder - \$232.80
- (4) - 8 oz Axcent #2 liquid - \$25.00
- (4) - 1 qt Axcent #2 liquid - \$53.10

ADVANTAGES:

- + Quick 15-minute curing time.
- + Met specifications for porosity, translucency, and plasticity.
- + Comparable surface hardness to other acrylics.
- + Possesses adequate bond strength to denture teeth.
- + Less expensive than comparable acrylics.
- + Minimal initial learning curve.

DISADVANTAGES:

- Sticky consistency after mixing and during packing.
- Working times not included in instructions.
- Slightly lower flexural strength than comparable acrylics.

SUMMARY AND CONCLUSIONS:

Axcent 15-Minute Cure Acrylic is a heat-cured acrylic that offers an accelerated method to process denture bases and other appliances. The material can be cured immediately following final packing using boiling water and a 15-minute curing period. Axcent uses the familiar compression-molded denture packing technique and does not have a steep initial learning curve. The short curing time was highly appreciated by evaluators but its handling characteristics were not as user-friendly as familiar acrylics in use. Evaluators reported Axcent had an adequate working time (3-5 minutes), however it displayed a sticky consistency during trial packing. DIS laboratory testing revealed Axcent met standards with regard to porosity, translucency, and plasticity. Testing also revealed Axcent's flexural strength was slightly lower than two other tested acrylics, but its hardness, and bond strength to denture teeth were comparable. Axcent is less expensive per unit than other currently-used denture base acrylics. Although evaluators did not recommend its purchase to replace their currently-used acrylic, users did note that it would be an excellent material to have on hand for situations that require expedient completion. **Axcent 15-Minute Cure Acrylic** is rated **Acceptable** for use by the federal dental services.