Epoxy Preparation Method (2011)

Materials Used:

Epon 828 resin
Jeffamine T-403 hardener
Fillers: Almatis A-20SG or Almatis T-64

Procedure:

1. Dry the alumina powder at 107°C for 4 hours.
2. Heat the 828 and T-403 at 70°C for 1 hour.
3. Fill out and follow Epoxy Sample worksheet.
4. Measure the resin (100 pbw) and hardener (43 pbw) into container and hand stir.
   Use the following proportions: 20%—129 pbw
   30%—222 pbw
   40%—345 PBW
5. Degas at 1-3 torr. Approximately 3 minutes after foam rise collapse.
6. Pour into 1/2 inch diameter syringes or mold (preheat metal mold.)
7. Degas at 1-3 Torr until bubbles are no longer visible.
8. Place samples in preheated 80°C oven for 24 hours.