Technical Data Sheet

The Addition of Benzoyl Peroxide Catalyst to LR White Resin Supplied Uncatalyzed Form

#14381-UC and 14383-UC

The catalyst supplied by Electron Microscopy Sciences for addition to our LR White Resin is a form of benzoyl peroxide in a solution to render it safe in transit. Recent modifications to the formulation of this agent by our suppliers result in more catalyst being required if the resin is to polymerize as specified. Accordingly, one 500g bottle of LR White Resin now requires 9.9g of catalyst to be added. If bought in pre-measured aliquots from us, one aliquot should be added to each bottle.

As before, the catalyst should be added to the resin at room temperature and the resin must be shaken thoroughly immediately after addition of catalyst. The catalyst will take a full 24 hours at room temperature to dissolve completely and during this time it is most helpful if the bottle can be shaken from time to time. Do not attempt to heat the resin in order to speed the dissolution of the catalyst. Once mixed and fully disolved, the resin must be stored at 4°C to maintain its shelf life. Once catalyzed, LR White's shelf life is twelve months if store carefully.

Freshly catalyzed and thoroughly oxygenated resin may take a little longer than normal to polymerize. A test aliquot should be polymerized at 60°C for 24 hours following addition of catalyst as a quality control measure. In the unlikely occurence of this not polymerizing satisfactorily, please contact Electron Microscopy Sciences for further advice.

We do not advise catalyzing less than 500g (one full bottle) of LR White Resin, as it can be difficult to accurately measure smaller quantities of the reagents.

LR White Resin with insufficient catalyst will normally polymerize eventually by thermal curing, though curing items may be protracted. If polymerized using LR White Accelerator, however, it may only cure to a gel.

If the addition of catalyst is performed correctly, you should expect the resin to behave in the same exemplary way customers have come to expect from the LR White family of resins.