

MC Dip Coating Resist



Technical Data Sheet

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MC Dip Coating Resist Properties

MC Dip Coating Resist is a low-cost, ready-to-use (ready-diluted), positive tone resist optimized for dip coating with improved large-scale resist film thickness homogeneity. Its dye allows a fast and easy visual inspection on the coating performance. The attainable resist film thickness range is approx. 2 ... 10 μm at a pull velocity of 3 ... 15 mm/s.

MC Dip Coating Resist contains two solvents: The low-boiling MEK causes a fast pre-drying of the resist film thus preventing resist flowing towards the bottom of the substrate (panels) to be coated. The high-boiling (= slowly evaporating) PGMEA yields a very smooth resist film surface.

Dip Coating

A pull velocity of 5-8 mm/s is recommended for a high coating homogeneity. Between the dip coating steps, it is recommended to cover the tank in order to prevent the evaporation of MEK and the incorporation of particles into the liquid resist.

After coating, few minutes delay at room temperature will allow the resist film to smoothen.

Softbake

We recommend 100°C for one minute/ μm resist film thickness. If using an oven, add approx. 3 minutes the substrate needs to achieve the final temperature.

Exposure

MC Dip Coating Resist is g-, h- and i-line sensitive. Typical exposure doses are 250 ... 1.500 mJ/cm² for 2 ... 10 μm resist film thickness.

Development

We recommend "AZ[®] Developer" (aqueous sodium metasilicate solution) either concentrated (high development rate) or 1 : 1 diluted with DI-H₂O (high contrast). Any other NaOH-, KOH-, or TMAH-based developers will probably also work.

Hardbake

If the resist mask is used for wet-chemical etching, a hardbake at 145°C for 5 minutes will reduce the degree of underetching. After baking, the substrate should NOT be cooled down abruptly in order to avoid mechanical stress. Just putting the substrates back into the carrier (or panels into a suited frame) will be perfect.

Resist Removal

Alkaline strippers such as "AZ[®] 100 Remover" or an approx. 3 % aqueous KOH- or NaOH-solution will work. Many organic solvents are also suited for photoresist removal.

Sales Volume and Pricing

We supply MC Dip Coating Resist in 5 L bottles (smaller sales volumes if required). If you are interested in an offer or a free sample, please contact us!

