

# **Stopper for AR Resists**

## AR 600-60, 600-61 stopper

For the stopping of e-beam resist film development with solvents

### Characterisation

- immediate interruption of the development process
- ultrapure solvent mixtures for residue-free removal of remaining developer
- AR 600-60 for AR-P 617, 630-670 er, 6200
- AR 600-61 for AR-P 6510

### Properties I

Parameter / AR	600-60	600-61
Density at 20 °C (g/cm³)	0.785	0.964
Water content max. (%)	0.1	20
Non-volatiles max. (%)	0.002	0.002
Flash point (°C)	12	105
Filtration (µm)	0.2	
Storage up to 6 month (°C)	10-22	

#### Information on remover processing

The addition of stopper for approximately 30 s after development interrupts the development process and leads to a rapid rinsing of residual developer.

Due the processing regime however, constantly developer is transferred into the stopper bath. Already small amounts of the developer will affect the efficiency of the stopping process. It is thus highly recommended to constantly exchange the stopper or to use two stopper baths which are arranged consecutively.

If 10-20 % of stopper AR 600-60 is added to developers AR 600-50, 600-55 and 600-56, the development process is slowed down.

If the stopper AR 600-60 is used for developers AR-P 630-670, higher contrast values up to 10 are possible, while the sensitivity of the PMMA resists is at the same time decreased. Higher exposure doses and prolonged development times are thus required in this case.