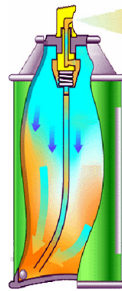


MCC

MICRO • CHEM

APPLICATIONS

- Conformal coatings
- Metallization
- Ideal for perforated, small, large & irregular shaped substrates
- Backside wafer coatings
- Severe topography, v-grooves, vias & other MEMS structures
- Microfluidic electrophoresis analysis (Lab-on chip)

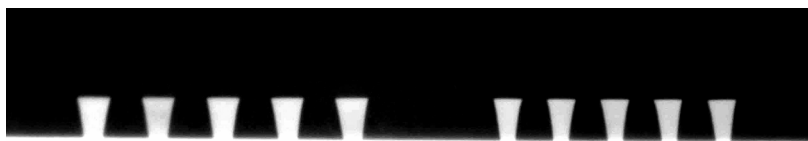


MicroSpray™ Photoresist

MicroSpray is a *negative* acting, aerosol resist, well suited for a broad range of lithographic purposes. This cost effective, easy to use, spray-can eliminates many of the process problems associated with spin coating thick resists and non-planar substrates such as those found in MEMs, Opto-electronics and other non-standard applications.

PRODUCT ATTRIBUTES

- Multi purpose resist product - excellent R&D tool
- Very low cost of ownership - no expensive coating equipment required
- Thick resist coatings demonstrated from 4- 20 μ m
- Compatible with MIF and metal-ion aqueous developers
- High throughput for thick films



4 μ m Lines/Spaces in 16 μ m thick Spray Coating of MicroSpray™

MicroSpray™ Process Parameters

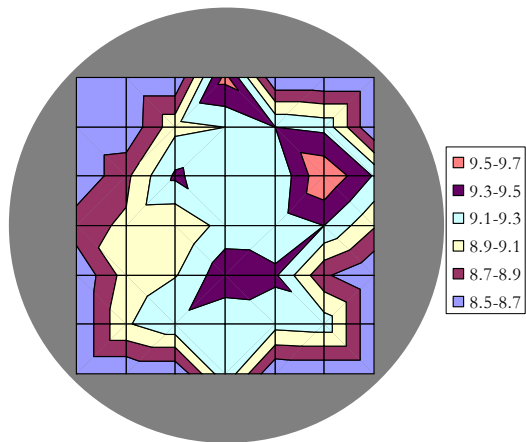
Substrate:	Silicon
Photoresist:	MicroSpray™ Negative
Coat:	Spray 9 right angle passes
Pause:	20°C/10 min.
Bake:	95°C/5 min. hotplate
Exposure:	360-450 nm, 400 mJ/cm ²
Post-exposure bake:	95°C/3 min. hotplate
Develop:	2.38% TMAH (0.26 N) 5 min.



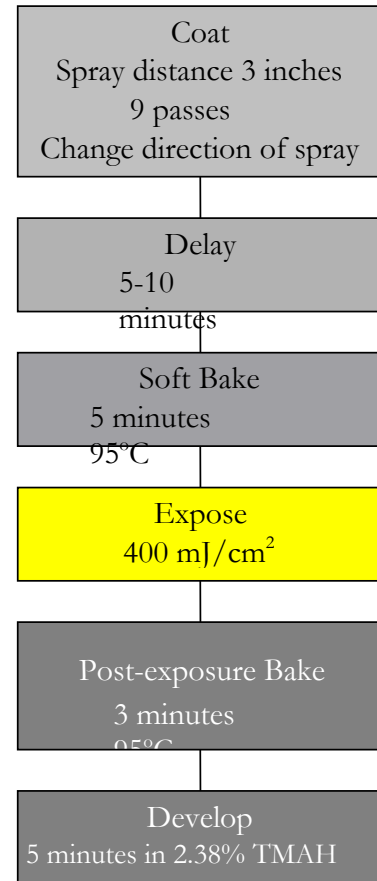
HOW TO USE MICROSPRAY

- Store can refrigerated for best use
- Place can at room temperature 1 hour prior to use
- Shake can vigorously 10 times
- Wait 5 minutes
- Make sure substrate is clean
- Hold can 3 inches from surface
- Spray surface using 9 overlapping patterns
- Wait 5-10 minutes (micro-bubbles will disappear)
- Bake coated substrate for 5 minutes at 95°C
- Expose coated substrate to UV light (360-450 mJ/cm²)
- Post-exposure bake for 3 minutes at 95°C
- Develop for 4-6 minutes in 2.38% TMAH (or NaOH)
- Rinse and Dry

COATING UNIFORMITY



Coating thickness (100 mm) **9.14 μm**
 Standard deviation **0.24 μm (2.6%)**



MicroSpray™ Product Specifications

Container:	Aerosol can
Weight:	16 oz. (454 g.)
Dimensions:	8 in tall, 2.5 in. dia.
Resist volume:	14.5 oz. (411 g.)
Coatings:	200, 4 in. wafers (approx.)
Shipping:	Air and ground