

Technical datasheet

AZ® Remover 920 Photoresist Stripper

IC Grade Formulated Organic Solvent Based Remover

AZ® Remover 920 photoresist stripper is designed for **fast delamination** and dissolution of photoresist patterns while maintaining **broad compatibility** with device substrates and metal films. Merck's proprietary solvent and additive blend is **environmentally friendly** and fully compliant with the European Union's REACH regulatory code.

APPLICATIONS

- Bulk Photoresist Removal
- Metal Lift-off Lithography
- Cu Pillar Metallization Cleans
- RDL Metallization Cleans
- Delamination of Heavily Cured Photoresist Patterns & Organic Residues

DEVICE COMPATIBILITY

- *Substrates*
 - Si, SiO₂, GaAs
- *Metals*
 - Al, Cu, Ti, W, TiW, TiN, Sn, Ni
- *Insulators*
 - TEOS, SiO₂, SiN, SiON

POLYMER REMOVAL

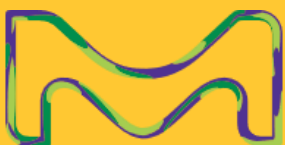
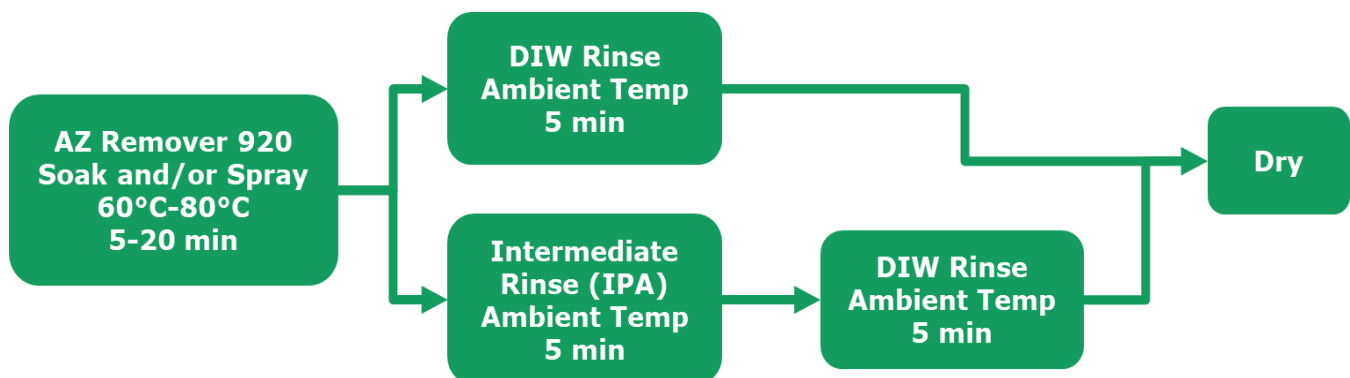
- *Full Dissolution & Delamination*
 - DNQ/Novolac Positive Photoresists (AZ® P4620)
 - Chemically Amplified Positive Photoresists (AZ® 3DT)
- *Fast Delamination*
 - Chemically Amplified Negative Tone PR (AZ® 15nxt, AZ® nLOF & AZ® ANR series)

CHEMICAL PROPERTIES

- Organic solvent based with amine additives
- EHS Friendly - NMP, DMAC & TMAH free
- Alkaline pH
- High boiling point of 188°C, low evaporation
- Flash point of 84.4°C

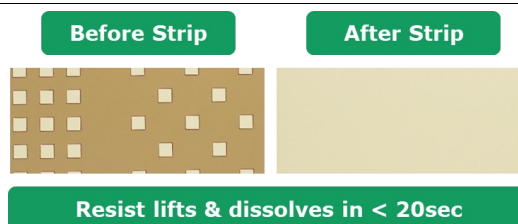
REMOVAL PROCESSING CONDITIONS

- AZ® Remover 920 is fully water miscible and can go directly to DIW rinse.
- IPA or alternate intermediate rinse solvent can also be used.
- Recommended operating temperature is 60°C to 80°C.
- Suitable for use on wet bench, batch-spray, soak & spray, or single-wafer spray tooling.
 - Compatible with PTFE, HDPE, 316L EP Stainless Steel & Quartz. Incompatible with Viton.



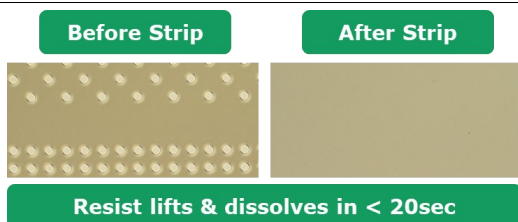
REMOVAL OF AZ® P4620 PHOTORESIST

- Substrate 8" Silicon
- Film Tks 12.6 µm
- Exposure i-line 600 mJ/cm²
- Soft Bake 110°C/240sec
- PEB none
- Development AZ® 300MIF 4 x 60sec
- Remover Bath 80°C / 5min soak



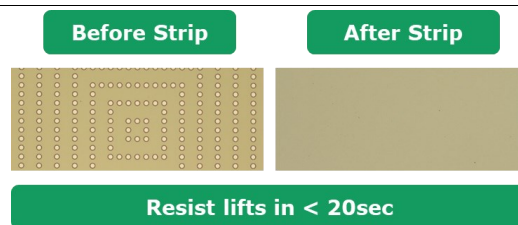
REMOVAL OF AZ® 3DT PHOTORESIST

- Substrate 8" Silicon
- Film Tks 12.6 µm
- Exposure i-line 400 mJ/cm²
- Soft Bake 110°C/300sec
- PEB none
- Development AZ® 300MIF 2 x 60sec
- Remover Bath 80°C / 5min soak



REMOVAL OF AZ® NLOF2070 PHOTORESIST

- Substrate 8" Silicon
- Film Tks 7.8 µm
- Exposure i-line 2200 mJ/cm²
- Soft Bake 110°C/90sec
- PEB 110°C/90sec
- Development AZ® 300MIF 1 x 90sec
- Remover Bath 80°C / 5min soak



REMOVAL OF AZ® 15NXT PHOTORESIST

- Substrate 8" Silicon
- Film Tks 11.2 µm
- Exposure i-line 900 mJ/cm²
- Soft Bake 110°C/180sec
- PEB 120°C/60sec
- Development AZ® 300MIF 2 x 60sec
- Remover Bath 80°C / 5min soak



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