

NOE Etchant

For removal of deposited residual oxides

NOE Etchant is based on an innovative, patented formula of proprietary materials and organic solvents. Etchant blend is specially designed to remove deposited residual oxides which are present after RIE plasma etching.

NOE Etchant has been successful in removing residual oxide deposits after polysilicon etch, aluminum etch and via etch.

NOE Etchant has also been successful in reducing surface metal ion impurity levels on SiO₂, BPSG, SOG and deposited oxide layers. This impurity reduction provides a substantial increase in yield on devices that are sensitive to ionic impurities.

BATH MAKE-UP

NOE Etchant is formulated as a ready-to-use solution.

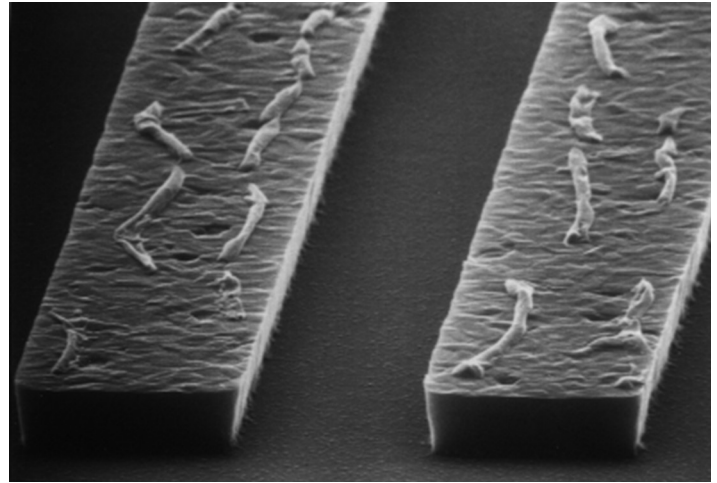
PROCESS

The following is a typical process for the use of NOE Etchant. Customers should consult with technical personnel for specific process requirements.

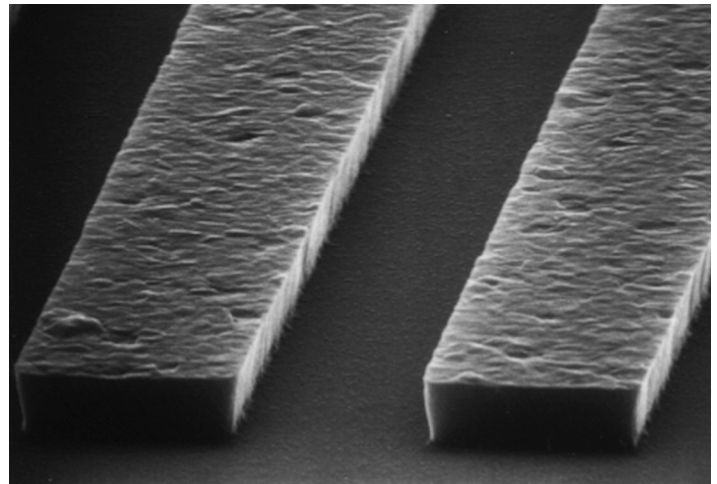
1. NOE Etchant is formulated to operate at 21°–23°C (69.8°–73.4°F).
2. Immerse **dry** substrates into the NOE Etchant according to the following recommended process time:

Type	Solvent	Time
NOE Etch	Ethylene glycol	15–30 min

3. Rinse with DI water and spin dry.



AlCu 0.5%/TiW after etch, O₂ plasma and organic stripper.



AlCu 0.5%/TiW after etch, O₂ plasma, organic stripper and NOE etchant.

QUALITY CONTROL

NOE Etchant is manufactured utilizing strict quality controls to maintain Entegris' high standards and to ensure batch-to-batch consistency.

Trace metal impurities

Material	Maximum
Copper	500 ppb
Iron	500 ppb
Nickel	500 ppb
Potassium	500 ppb
Sodium	500 ppb

EQUIPMENT COMPATIBILITY

NOE Etchant will etch glass and quartz. Therefore, a clean poly or Teflon® tank should be used. In addition, NOE Etchant is slightly hygroscopic, and etch rates may increase as the water content increases. As a precaution, all containers of NOE Etchant should be kept covered at all times when not in use.

Compatible Materials

- PVDF
- Teflon (PTFE)
- Kalrez®
- Ethylene-propylene
- High-density polyethylene (HDPE)
- Polypropylene

Incompatible Materials

- Viton®-A
- Pyrex®
- Hypalon®
- Tygon® (some types)
- Buna-n rubber
- Neoprene
- PVC
- PVDC
- CPVC
- Acrylics
- Quartz
- Polyurethane
- Polyacrylate
- 304 stainless steel

STORAGE AND HANDLING

NOE Etchant has a shelf life of one year from date of manufacture when stored in their original, unopened containers, in a dry place at 10°–32°C (50°–90°F), out of direct sunlight. Refer to Material Safety Data Sheet for additional storage and handling information.

DISPOSAL

All waste materials must be disposed of in accordance with local, state and federal regulations. Refer to Entegris' Material Safety Data Sheet for additional data.

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit entegris.com and select the Contact Us link to find the customer service center nearest you.

TERMS AND CONDITIONS OF SALE

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit entegris.com and select the Terms & Conditions link in the footer.



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