AIPAD Etch 639

AIPAD Etch 639 is an oxide etchant designed to minimize attack on aluminum pads or other aluminum structures and on silicon surfaces. These oxides are commonly grown in vapox silox or other LPCVD devices. The deposited oxide is often used as a passivation layer over a metallized silicon substrate. The formulation of AIPAD Etch 639 includes a surfactant to ensure wetout over high surface energy substrates.

Deposited Oxide (Vapox/Silox) Etch Rate: 5000 A / minute @ 22°C

This product contains:

- Ammonium Fluoride
- Glacial Acetic Acid
- Glycol
- Surfactant
- Deionized Water

PROPERTIES OF TRANSENE AIPAD ETCH 639

How do I increase the etch rate?	 The rate will approximately double with every 10°C increase in temperature. Increase the rate of stirring or agitation.
How do I reduce the etch rate?	Adding 1 part deionized water to 2 parts etchant will reduce the etch rate approximately 50%.
Do I need to dilute the etchant?	No, it is ready to use.
How do I reduce undercutting?	Increase the rate of stirring or agitation.
Appearance	Water-white
рН	Mild acidic
Etch Rate at 22°C 40°C	5,000 Å/min. 10,000 Å/min.

Etch Capacity 0 g/gallon

Shelf Life 1 year

Storage Conditions Ambient

Filtration 0.2 um

Recommended Operating

Temperatures

20-80°C (30-40°C most common)

Rinse Deionized water; may be followed by alcohol rinse if

desired.

Photoresist Recommendations <u>KLT6000 Series, KLT 5300 Series, HARE SQ (SU-8</u>

type), TRANSIST, or PKP Type II

Select Compatible Materials Aluminum, ceramic, gold, nickel, copper

See https://transene.com/etch-compatibility/ for more

details.

Select Incompatible Materials Silica, alumina, silicon nitride

Compatible Plastics HDPE, PP, Teflon, PFA, PVC

Country of Origin USA

Availability 1-2 Business Days

Available Sizes Quart, Gallon, 5 Gallon, 55 Gallon

Packaging HDPE

Packing 4 gallons/case

Isotropy	Isotropic
Incompatible Chemicals	_
Additional Information	_