

Standard Nitride Etch Recipe

Plasma Therm RIE

February 11, 2013

Equipment

Equipment	Plasma Therm RIE
Manufacture	Plasma Therm Inc.
Model	Wafer/Batch 790 Series
Platen size	10 in
Platen Material	Al

Recipe

Recipe Name	Standard Oxide
Gas	CHF ₃ 45 sccm
	O ₂ 5 sccm
Platen Power	250 W
RF Frequency	13.56 Mhz
Chamber Pressure	40 mTorr

Results ^a

Material	PECVD Nitride ^b
Etch Rate	882.38 Å/min ^c
Uniformity	3.51 % ^d
Mask:	Microposit SC1827 ^e
Selectivity (vs. PR)	N/A

^a: All data is updated as the date indicated above

^b: Nitride film was prepared with the *Standard Nitride recipe* in Oxford PECVD right

^c: An average value from 4 min etch

^d: Etching depth variation across a 4" wafer, defined as std/average

^e: Photo-resist was pre-baked @115 °C for 40 sec on a hotplate