

Standard Oxide Etch Recipe

Vision RIE 1

March 25, 2013

Equipment

Equipment	Vision RIE 1
Manufacture	Advanced Vacuum
Model	Vision-320 RIE
Platen size	12 in
Platen Material	Graphite

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	Thermo Oxide (Grown @ 1050 °C)
Etch Rate	250.03 Å/min ^b
Uniformity	2.02 % ^c
Mask:	Microposit SC1827 ^d
Selectivity (vs. PR)	0.93:1

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

^b: An average value from 15 min etch

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

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