



KL Spin-on Primer 80/20

KL Spin-on Primer is a blend of 80% PM Acetate and 20% HMDS.

The HMDS component is a chemical pre-treatment that increases adhesion to silicon, oxides, nitrides and other surfaces.

Process

Static dispense: ~ 0.5 ml / inch substrate diameter

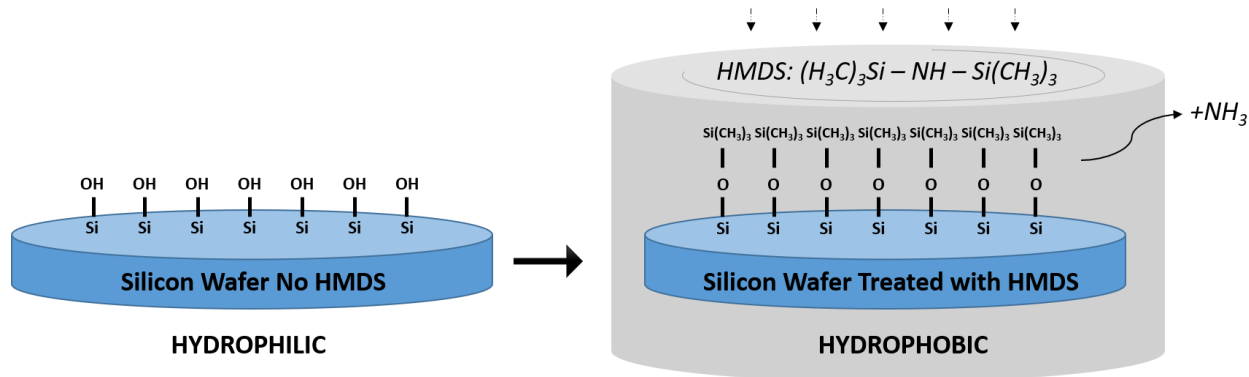
Allow Primer to contact substrate surface for at least 10 seconds

Spin dry (2500 - 5000 rpm for 30 seconds, or until dry)

Bake: 105 – 115°C for 1 -3 minutes

Chemistry

HMDS chemically bonds its Si atom to the oxygen of oxidized surfaces, accompanied by the release of ammonia (NH₃). The methyl groups of the HMDS fragment thereby form a hydrophobic surface and thus improve resist wetting and adhesion. The PM Acetate acts as a carrier and helps ensure a well dispersed mono-layer of HMDS is deposited on the substrate.



Processing Notes:

A well ventilated spin bowl area is highly recommended because the ammonia produced can contaminate certain photoresists and reduce performance.

Dehydration bake of substrate before application of Primer can help the effectiveness.

Storage Consideration: HMDS can form ammonia with moisture in the air over time and deteriorate. Store tightly closed in a cool environment.