

VECTOR HTS SERIES PRODUCTS

LAPPING/POLISHING SLURRY ADDITIVES FOR SEMICONDUCTOR MATERIALS

HTS-1 HTS-1.3 HTS-1.4 HTS-2 HTS-3

VECTOR HTS Series Products are biodegradable, viscous, polymer/surfactant mixtures formulated to be used with Aluminum Oxide (either PWA type or FO Type) and de-ionized water to form a suspension type lapping slurry. Designed primarily for use in lapping silicon wafers, VECTOR HTS Series Products fully disperse and suspend abrasive material for extended periods of time with relatively little change in physical or chemical characteristics. Designed for use on all types of lapping plates, the products perform particularly well with serrated or grooved plates. The HTS Series Products differ chemically and physically, resulting in differences in wetting, film strength and viscosity. Allow an HTS Series Product to be specified by an Intersurface Dynamics trained sales engineer. Some of the variables that effect HTS Series Product choice include; type of lapping plates, type of pumping system, brand of machine, operating pressure, type of abrasive. A choice of VECTOR HTS Series Products provides the user with precisely the correct chemistry for achieving optimum results from a lapping process.

Benefits:

- Produces flatter wafers
- Reduces wafer damage
- Increases cut rate
- Helps to eliminate scratching
- Facilitates post-lapping cleaning
- Provides more consistent results
- Helps prevent wafer staining
- Reduces abrasive use

Directions:

VECTOR HTS Series Products should be mixed with deionized water and abrasive using the following slurry formula: 77-82% water, 15-18% abrasive, 3-5% HTS Series Product. Use an agitator with a marine type propeller and a motor capable of 1750 RPM. Use a low shear dispense pump for feeding the mixed slurry onto the lap.

Disperse the abrasive with DI water between 500 and 1500 rpm for 10 minutes. Add HTS Series Product. Mix for approximately 5-10 minutes. Avoid sucking air into the slurry during mixing. A small vortex should form at the surface of the slurry when the product is mixed. Afterwards, turn the mixer off, or to a maximum of 50 rpm.

Additional Information:

VECTOR Products are available in 5-gallon pails and 55-gallon drums, F.O.B. Bethel, Connecticut, and include: grinding fluids, sawing fluids, rinse/wash agents and ultrasonic detergents. Call regarding warehouse distribution in Seoul, KOREA, Tokyo, JAPAN and Zurich, SWITZERLAND. Material Safety Data Sheets are available upon request.