



Surface Preparation Division

## Poretex 3LN™ Polishing Pads

*Creatively engineered to conquer your surface preparation and polishing challenges.*

### PRODUCT DATA SHEET

#### Advanced Materials Preparation Polishing Pads

Many of the emerging technologies that use sapphire, silicon carbide and ceramic wafers need a very flat surface and high degree of surface finish with low defect densities. The polishing of these materials requires use of different pads and slurries and the modification of the basic variable parameters that are applied to the polishing machine. Spartan Polishing Pad Division has a developing line of pads that address the critical needs of these hard materials.

#### Polishing Pad Detailed Information

All pads are available with our own specially developed PSA, magnetic or loop backing to be used with various hook attachments. We currently have 2 types of PSA that cover 2 specific markets. Our standard for the glass industry is one that resists temperatures up to 120°F, peels easily from the plate and can actually be reapplied. Our second type of PSA is a 3M product that is temperature resistant up to 160°F, resistant of pH changes from 5 to 10, but may leave some adhesive on the plate (depending on how it is run and removed).

#### Poretex 3LN™ Polishing Pad Characteristics

Spartan Polishing Pad Division's suede polishing material is designed to generate final polished surfaces using submicron slurries. It's unique, resilient design allows the pore structure to recover from polishing compression and sets up a fluid transfer action with the slurry. Poretex Pads are available in plain, embossed or textured front surfaces. Pressure sensitive adhesive is standard for use with a wide pH slurry range. Our Poretex 3LN™ is excellent for semiconductor and compound semiconductor wafers, quartz, sapphire, silicon carbide and various crystals.



#### Description

Spartan Poretex 3LN™ Pads - Suede Polishing Material; black nap

#### For Use With

semiconductor, compound semiconductor, sapphire, silicon carbide, ceramic and other advanced materials

#### Hardness, (Asker C)

65 +/- 3

#### Compressibility (%)

3.9 +/- 0.8

#### Compressive Elastic Modulus, (%)

70 +/- 10

#### Weight

522 +/- 50 grams/square meter

#### Thickness

1.37 +/- 0.10 mm

#### Thickness of Nap Layer

500 +/- 80  $\mu$

#### Open Pore Size

80 +/- 20  $\mu$

### SPARTAN FELT CO. – SURFACE PREPARATION DIVISION

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