



MICRONIZED LABORATORY ABRASIVES

Micronized Laboratory Abrasives are a fairly new tool available to the Material Scientist from PSI. Micronized Laboratory Abrasives, manufactured by the 3M Company, can replace traditional abrasive papers commonly used in the Met Lab. The unique features of this product enable the user to achieve the basic laboratory requirements of finish and flatness. With Micronized Laboratory Abrasives, these goals will be reached with greater speed and more repeatable results.



Excellent finish is achieved by the precision grading system used to select abrasive particles for each grade. Classified by the more accurate micron grading system, particle size grading is held to much tighter tolerances than conventional abrasive products. This results in a higher density of the specified particle size available to do the grinding required. This controlled uniformity of particle size, combined with electrostatic coating of the polyester film backing, provides an unexcelled grinding product.

MICRON GRADES AVAILABLE			
Al ₂ O ₃ PB	Al ₂ O ₃ PSA	SiC PB	SiC PSA
180	180		
150	150		
120	120		
100	100	100	100
80	80	80	80
60	60	60	60
40	40	40	40
30	30	30	30
15	15	15	15
9	9		
PB=Plain Back		PSA=Adhesive Back	

Specimen flatness is achieved and maintained through the grinding steps by the consistent 5 mil caliper of the dense, polyester backing. Unlike the

traditional paper products, the abrasive particles cannot "recede" into the backing. This feature results in shorter grind times and longer life because the abrasive particles remain at the "cutting" interface. Shorter grind times mean less heat generation in the material being ground. Longer life means improved lab economics.

GRADE COMPARISON CHART		
Micron	ANSI (U.S.)	FEPA (European)
180	80	80
150	100	100
120	120	120
100	150	150
80	180	180
60	220	220
40	320	360
30	400	600
15	800	1200
9	1200	2000

Micronized Laboratory Abrasives are available in both Aluminum Oxide (Al₂O₃) and Silicon Carbide (SiC). Aluminum Oxide is recommended for use on ferrous materials. Silicon Carbide product should be used on non-ferrous materials. Both abrasive types can be ordered from PSI in discs, rolls and sheets. A complete description of the various available products can be found in the PSI Catalog.

If your lab work can benefit from flatter, more consistent finishes combined with shorter grinding cycles and longer abrasive life, you should consider Micronized Laboratory Abrasives from PSI.

