



ALUMINUM OXIDE NANOCOMPOSITES

UNSURPASSED SCRATCH RESISTANCE

THE POWER OF NANOALUMINA IN A SAFE, EASY-TO-DISPERSE, NON-NANO WAX POWDER

Micro Powders harnesses the exceptional durability of Al₂O₃ (Mohs Hardness 9) as a nanopowder embedded in an ultrafine wax composite particle. These "AL" nanocomposites deliver the power of nanoalumina to the surface of all types of coating systems.

- Safer to use and significantly easier to disperse into coatings
- Markedly less abrasive on processing equipment

POLYFLUO® 523AL

HDPE/PTFE/alumina with lubricity/slip (lower COF)

MPP-611AL

HDPE/alumina with lubricity/slip (PTFE free)

MPP-123AL

LDPE/alumina for anti-slip surfaces (higher COF)

MICROKLEAR 418AL

Natural, biodegradable carnauba wax/alumina

TYPICAL PROPERTIES

	POLYFLUO 523AL	MPP-611AL	MPP-123AL	MICROKLEAR 418AL
COMPOSITION	Polyethylene/PTFE/aluminum oxide	HDPE/aluminum oxide	LDPE/aluminum oxide	Carnauba wax/aluminum oxide
MELTING POINT (°C)	113-117	110-116	110-113	81-86
DENSITY @ 25°(g/cc)	1.09	0.99	0.97	1.04
MAXIMUM PARTICLE SIZE (µm)	15.56	15.56	31.00	22.00
MEAN PARTICLE SIZE (µm)	3.5-5.5	3.5-5.5	9.5-12.5	6.0-8.0

PERFORMANCE DATA

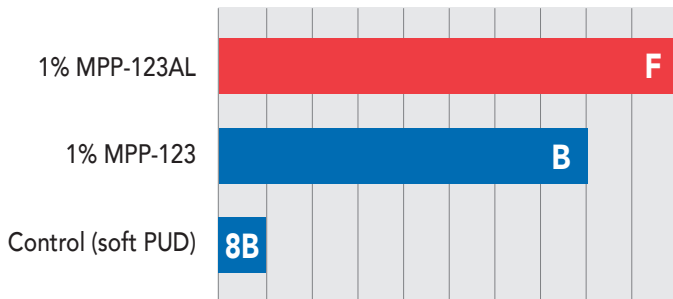
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SCRATCH RESISTANCE

(ASTM D3363: Standard Test Method for Film Hardness by Pencil Test)

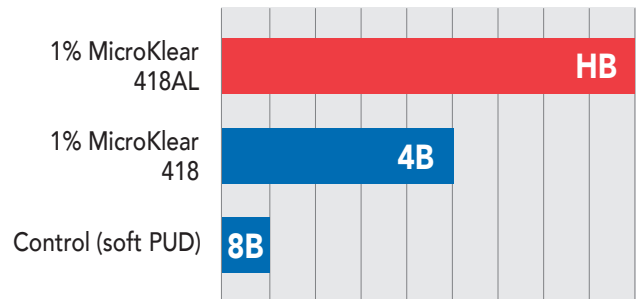
MPP-123AL

LDPE/alumina for anti-slip surfaces (higher COF)



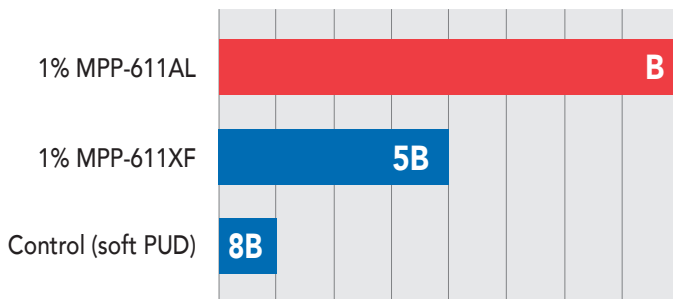
MICROKLEAR 418AL

Natural, biodegradable carnauba wax/alumina



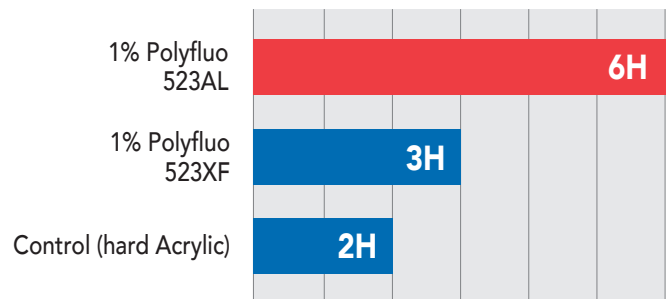
MPP-611AL

HDPE/alumina with lubricity/slip (PTFE free)



POLYFLUO 523AL

HDPE/PTFE/alumina with lubricity/slip (lower COF)



MICRO POWDERS, INC.