



SPECIALTY WAX ADDITIVES AND FINE POWDERS

PTFE REPLACEMENTS



Micro Powders



SMALL PARTICLES **BIG IDEAS**[®]

Micro Powders offers the most comprehensive portfolio of PTFE replacement surface modifiers available in the industry.

With multinational approvals and global food contact compliance since 2019, these commercially proven powders and dispersions are designed to provide coating formulators with an arsenal of multi-functional ingredients that meet the industry's highest coating performance standards.

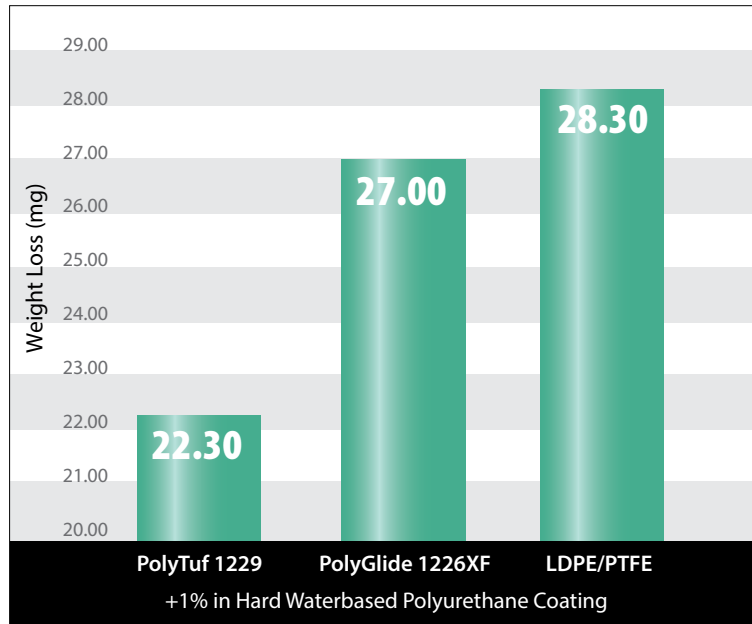
Our best-in-class engineered composite and nanocomposite additives combine natural and synthetic waxes with high performance materials that include aluminum oxide and ceramic, delivering performance equal to or better than conventional PTFE and PTFE combination additives.



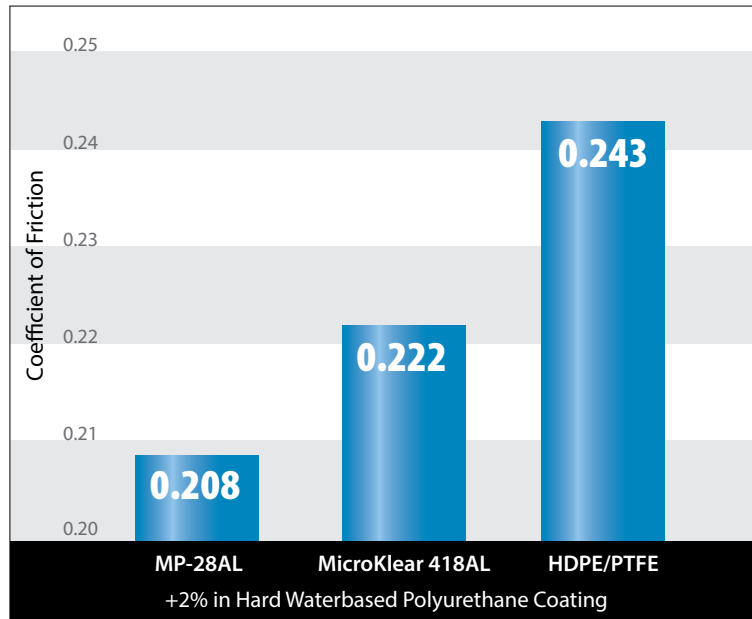
PTFE REPLACEMENT SURFACE MODIFIERS

| PRODUCTS | Wax Type | Melting Point °C | Density g/cm ³ | Particle Size (µm) | | Benefits |
|-------------------------------------|------------------------------------------------------------------------|------------------|---------------------------|--------------------|---------|-----------------------------------------------|
| | | | | Mean | Maximum | |
| MicroKlear 116 | Carnauba wax/HDPE/ | 107-113 | 0.98 | 4.0-5.25 | 15.56 | Slip, clarity, scratch |
| MicroKlear 116AL | Available as a waterbased dispersion Carnauba wax/HDPE/ aluminum oxide | 107-113 | 1.01 | 3.5-5.5 | 15.56 | Slip, scratch |
| MicroKlear 418AL | Available as a waterbased dispersion Carnauba wax/aluminum oxide | 81-86 | 1.04 | 6.0-8.0 | 22.0 | Scratch, clarity, natural |
| NEW MicroTex[®] 950 | Modified polyolefin | 135-140 | 1.22 | - | 74.0 | Fine texture in powder coatings |
| MP-28AL | Available as a waterbased dispersion Synthetic wax/aluminum oxide | 104-110 | 0.99 | 4.5-6.5 | 22.0 | Scratch, slip, anti-block |
| MPP-123AL | Available as a waterbased dispersion LDPE/aluminum oxide | 110-113 | 0.97 | 9.5-12.5 | 31.0 | Scratch, minimal slip |
| MPP-611AL | Available as a waterbased dispersion HDPE/aluminum oxide | 110-116 | 0.99 | 4.0-6.0 | 15.56 | Scratch, slip, gloss |
| MPP-635VF | Available as a waterbased dispersion HDPE | 123-125 | 0.97 | 6.0-8.0 | 22.0 | Scratch, abrasion, anti-block |
| NatureFine R331 | Available as a waterbased dispersion Rice bran wax | 77-82 | 0.96 | 6.0-10.0 | 31.0 | Slip, abrasion |
| NatureMatte[®] C44 | Cellulose | >260 | 1.46 | 10.0-15.0 | 44.0 | Slip, heat resistance |
| NatureTex[®] 325 | Cellulose acetate | >230 | 1.30 | 10.0-15.0 | 44.0 | Slip, heat resistance |
| PolyGlide 1226XF | Available as a waterbased dispersion HDPE/ceramic | 109-115 | 0.99 | 3.5-5.5 | 15.56 | Abrasion, slip, gloss |
| PolyTuf[®] 1229 | Available as a waterbased dispersion LDPE/ceramic | 110-113 | 0.97 | 9.0-12.0 | 31.0 | Abrasion, burnish |
| Superslip 6515AL | Available as a waterbased dispersion HDPE/amide/aluminum oxide | 139-145 | 0.99 | 3.5-5.5 | 15.56 | Scratch, slip, heat release |
| Superslip 6515AL-EZ | Surface treated HDPE/EBS/ aluminum oxide | 139-145 | 0.99 | 3.5-5.5 | 15.56 | Scratch, slip, heat release, easy to disperse |
| Superslip 6530 | HDPE/EBS | 124-135 | 0.97 | 6.0-7.5 | 22.0 | Scratch, abrasion, slip |
| NEW SuperGlide 1231 | Available as a waterbased dispersion EBS/ceramic | 141-146 | 1.00 | 5.0-8.0 | 22.0 | Abrasion, slip, anti-block |

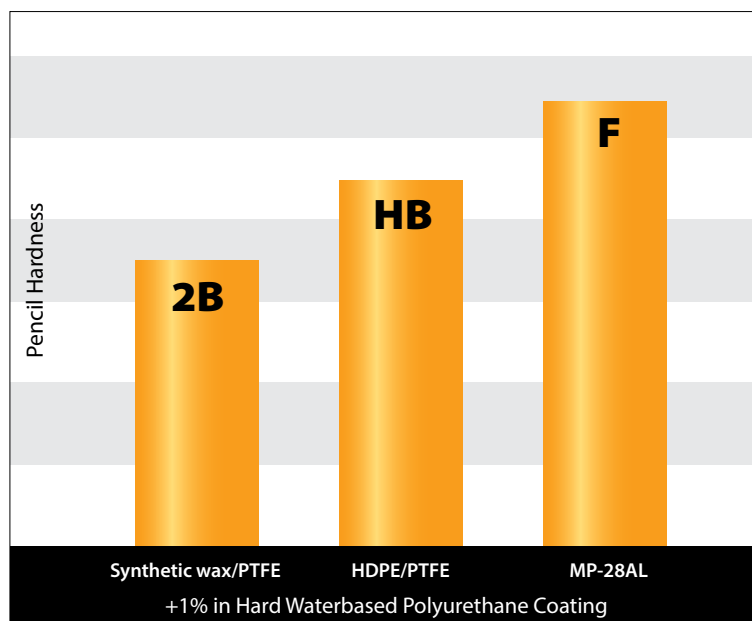
ASTM D4060
Abrasion Resistance
after 2500 cycles



ASTM D1894
Coefficient of Friction



ASTM D3363
Pencil Hardness
(Scratch)



PTFE REPLACEMENTS SELECTOR GUIDE

| Products | Description | Suggested Use Level | Scratch Resistance | Abrasion Resistance | Heat Resistance | Rub Resistance | COF Reduction | Gloss Retention | Biodegradable |
|-----------------------------------------------------------------|---------------------------------------------|---------------------|--------------------|---------------------|-----------------|----------------|---------------|-----------------|---------------|
| MicroKlear 116 | Carnauba wax/ HDPE | 1.0-3.0% | ☐ | ● | | ☐ | ● | ● | |
| MicroKlear 116AL | ☑ Carnauba wax/ HDPE/ aluminum oxide | 0.5-1.5% | ● | ● | | ☐ | ● | ● | |
| MicroKlear 418AL 🌿 | ☑ Carnauba wax/ aluminum oxide | 0.5-1.5% | ● | ☐ | | ☐ | ☐ | ☐ | ✔ |
| MP-28AL | ☑ Synthetic wax/ aluminum oxide | 0.5-1.5% | ● | ☐ | | ● | ● | ☐ | ✔ |
| MPP-123AL | ☑ LDPE/ aluminum oxide | 0.5-1.5% | ● | ☐ | | ● | ○ | ○ | |
| MPP-611AL | ☑ HDPE/ aluminum oxide | 0.5-1.5% | ● | ☐ | | ☐ | ☐ | ☐ | |
| MPP-635VF | ☑ HDPE | 1.0-3.0% | ☐ | ● | | ● | ☐ | ☐ | |
| NatureFine R331 🌿 | ☑ Rice bran wax | 1.0-3.0% | ○ | ● | | ☐ | ● | ○ | ✔ |
| NatureMatte® C44 🌿 | Cellulose | 2.0-5.0% | ● | ○ | ● | ● | ● | ○ | ✔ |
| NatureTex® 325 🌿 | Cellulose acetate | 2.0-5.0% | ● | ○ | ● | ● | ● | ○ | ✔ |
| PolyGlide 1226XF | ☑ HDPE/ceramic | 0.5-1.5% | ☐ | ● | | ● | ● | ● | |
| PolyTuf® 1229 | ☑ LDPE/ceramic | 0.5-1.5% | ☐ | ● | | ● | ☐ | ○ | |
| Superslip 6515AL | ☑ HDPE/amide/ aluminum oxide | 0.5-1.5% | ● | ☐ | ☐ | ● | ● | ● | |
| Superslip 6515AL-EZ | Surf. treated HDPE/ amide/aluminum oxide | 0.5-1.5% | ● | ☐ | ☐ | ● | ● | ● | |
| Superslip 6530 | HDPE/EBS | 1.0-3.0% | ☐ | ● | ☐ | ☐ | ● | ☐ | |
| NEW SuperGlide 1231 🌿 | EBS/ceramic | 0.5-1.5% | ● | ☐ | ☐ | ☐ | ● | ☐ | |

● Extremely Effective
 ☐ Very Effective
 ○ Effective
 🌿 Natural or naturally derived
 ☑ Available as a waterbased dispersion

NEW For Powder Coating Texture

MicroTex® 950 Modified polyolefin | 4.0-6.0% suggested use level | fine texturing with low gloss

Choosing the best PTFE replacement additive doesn't have to be intimidating. We are always available to provide technical assistance either directly or through one of our certified distribution partners around the globe.



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