FINAL POLISHING SUSPENSIONS

Final polish solutions remove the final layer of surface deformation often invisible to the naked eye. Yet the removal of this deformation is essential when evaluating with high magnifications, polarized light, differential interference contrast as well as using EBSD techniques. A variety of application specific suspensions are available to provide superior performance.

MasterMet™, chemo-mechanical colloidal silica (SiO_2), is especially suited for ferrous and nonferrous materials, titanium, semiconductors and hard materials such as ceramics.

Water sensitive materials can be handled with MasterPolish™ which contains little water. The solution provides high material removal rate due to a combination of the high pH and blending of alumina and colloidal silica abrasives.

Alumina solutions are best for soft materials such as aluminum, brass, copper, precious metals and electronics. In addition, MasterPrep™ is well suited for automated dispensing.

Material	Characteristics	Part Number	Size
MasterPrep Alumina 	• Sol-gel alumina suspension • ~8.5pH • Excellent for minerals, ferrous metals, low melting point alloys, carbides, PWB's, precious metals and electronics • 0.05µm	63-6377-006 40-6377-032 40-6377-064	6oz [0.18ℓ] 32oz [0.95ℓ] 64oz [1.9ℓ]
MasterMet Colloidal Silica 	• Amorphous colloidal silica suspension • ~10pH • Chemo-mechanical polishing action • Excellent for metals, minerals, ceramics and polymers • 0.06µm	40-6370-006 40-6370-064	6oz [0.18ℓ] 64oz [1.9ℓ]
MasterMet 2 Non-Crystallizing Colloidal Silica 	• Non-crystallizing amorphous colloidal silica suspension • ~10.5pH • Chemo-mechanical polishing action • 0.02µm	40-6380-006 40-6380-064	6oz [0.18ℓ] 64oz [1.9ℓ]
MasterPolish Final Polish 	• Blend of 0.05µm high purity alumina and colloidal silica • ~9pH • Contains minimal water and is optimal for water sensitive materials • Excellent for most magnesium alloys, cobalt alloys, most iron alloys, nickel, metal matrix composites • 0.05µm	40-10084	32oz [0.95ℓ]
MasterPolish 2 Final Polish 	• Chemo-mechanical polishing action • ~10pH • Excellent for sapphire, glass, alumina, silicon nitride, metal/ceramic composites • 0.06µm	40-6376-032	32oz [0.95ℓ]

Products available Worldwide unless noted by the following:

1 North & South America

2 Europe, Africa & Middle East

3 Asia

Final Polishing Suspensions (cont'd)

Material	Characteristics	Part Number	Micron	Size
MicroPolish™ Alumina Powder & Suspension 	• Agglomerated alumina offers higher removal rates than other aluminas of the same size • Good for use on magnesium, lead and their alloys	**Powders** 40-10075 40-10077 40-10079 40-10076 40-10078 40-10080 **Suspensions** 40-10083 40-10082 40-10081	 0.05µm 0.3µm 1µm 0.05µm 0.3µm 1µm 0.05µm 0.3µm 1µm	 1 lb [0.45kg] 1 lb [0.45kg] 1 lb [0.45kg] 5 lb [2.3kg] 5 lb [2.3kg] 5 lb [2.3kg] 6oz [0.18ℓ] 6oz [0.18ℓ] 6oz [0.18ℓ]
MicroPolish II Alumina Powder & Suspension 	• High quality deagglomerated alumina • Produces better surface finishes than agglomerated versions • Suitable for most minerals and metals	**Powders** 40-6323-016 40-6321-016 40-6323-080 40-6321-080 **Suspensions** 40-6363-006 40-6363-128 40-6361-006	 0.3µm 1µm 0.3µm 1µm 0.3µm 0.3µm 1µm	 1 lb [0.45kg] 1 lb [0.45kg] 5 lb [2.3kg] 5 lb [2.3kg] 6oz [0.18ℓ] 1gal [3.8ℓ] 6oz [0.18ℓ]
Topol* 	• Neutral pH	**Topol 1** 151101 [2, 3] 151101-A [2, 3] **Topol 2** 151102 [2, 3] 151102-A [2, 3] **Topol 3** 151103 [2, 3]	 1µm 1µm 0.7µm 0.7µm 0.25µm	 1000mℓ 20ℓ 1000mℓ 20ℓ 1000mℓ

** Refer to regional maps in footer for product availability*

See pages I-IV for ordering information or visit www.buehler.com.