

MetaDi®

Diamond Paste



BUEHLER

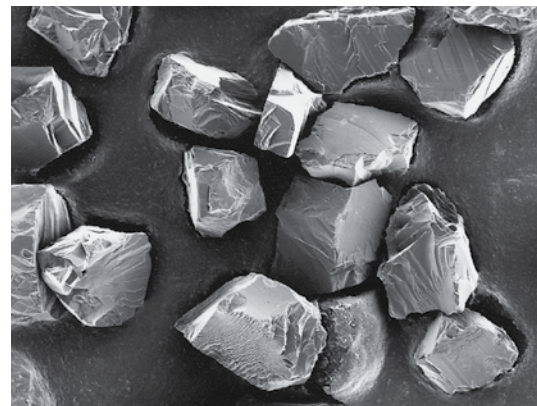
Excellent Results. Easily Repeatable.™

MetaDi® and MetaDi® II Diamond Paste



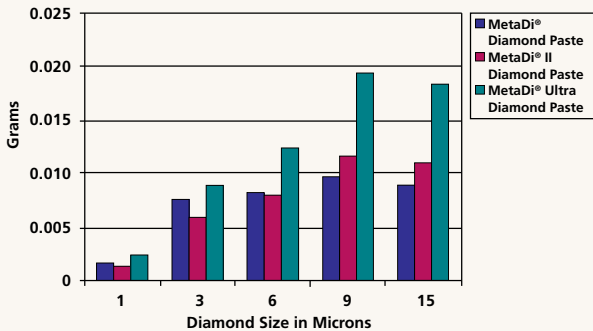
MetaDi® and MetaDi® Diamond Paste

- MetaDi® Diamond Paste utilizes virgin natural monocrystalline diamond, graded for particle size as well as shape
- MetaDi® II Diamond Paste contains economical monocrystalline synthetic diamond
- The finely graded diamond abrasive particles are blocky and have sharp edges to ensure clean and efficient cutting
- Color coded by micron size for easy identification
- Packaged in easy-to-use dispensing syringe
- Can be used with ApexHercules™ Rigid Grinding Discs and with Polishing Cloths
- Available in 5g and 20g sizes

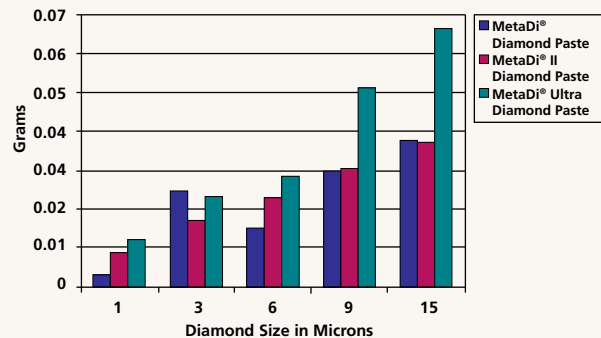


Sharp edges of monocrystalline diamonds of MetaDi® Diamond Paste ensure clean and efficient cutting action.

**Grams Removed in 1 Minute
HRC 40 Steel**



**Grams Removed in 1 Minute
Copper Alloy**

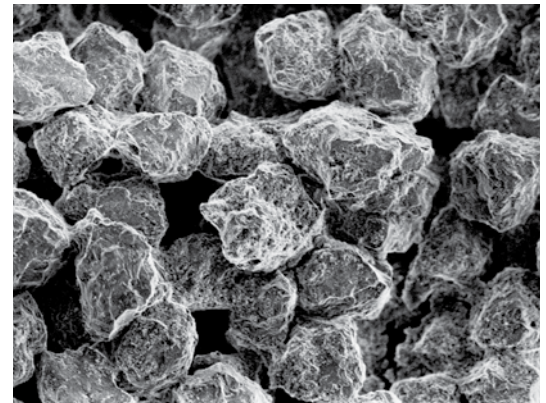


MetaDi® Ultra Polycrystalline Diamond Paste



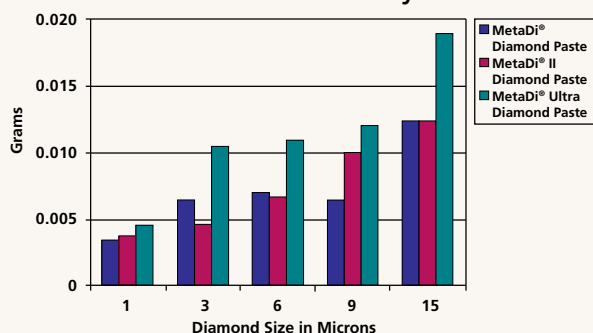
MetaDi® Ultra Polycrystalline Diamond Paste

- MetaDi® Ultra is a blend of polycrystalline diamond and natural diamond that combines the excellent cutting ability of natural diamonds and the extended durability of synthetic diamonds.
- Provides highest removal rates, best surface finishes and least subsurface deformation on metals and other materials
- MetaDi® Ultra Paste offers more cutting facets resulting in higher removal rates and shorter polishing time
- Color coded packaging by micron size for easy identification
- Packaged in easy-to-use dispensing syringe
- Can be used with ApexHercules™ Rigid Grinding Discs and with Polishing Cloths
- Available in 20g size



Angular, blocky-shaped polycrystalline diamonds of MetaDi® Ultra provides numerous cutting facets on the particle surface, resulting in less deformation

Grams Removed in 1 Minute Aluminum Alloy



Benefits of Diamond Paste

Diamond paste products are best suited to materials prone to diamond embedding. Diamond paste provides the most immediate cutting action resulting in higher removal rates, superior surface finishes and least subsurface deformation. Pastes are typically applied to a clean cloth by rotating the platen at approximated 50 rpm and by placing syringe tip about 2" [5cm] out from the center of the platen. Start dispensing the paste onto the cloth, resulting in a spiral pattern, and if a raised bead is present, too much product has been dispensed. Diamond paste products can be utilized with a lubricant such as MetaDi® Fluid to deliver an extended lifetime.

Applications

MetaDi® and MetaDi® II applications include soft alloys, micro-electronic materials and general-purpose polishing of metals, plastics, and other polymeric based materials.

MetaDi® Ultra is best for increased material removal with abrasion-resistant materials such as refractory metals and ceramics. Other applications include: wood, coal, cement clinker, magnesium, bone and soft geologic samples.

Ordering Information

Diamond Size	Color	Quantity	MetDi® Heavy Concentration	MetaDi® II Medium Concentration	MetaDi® Ultra Heavy Concentration*
0.25µm	Gray	5 grams	40-6112	40-6241	
0.25µm	Gray	20 grams	40-6102	40-6240	
1µm	Blue	5 grams	40-6138	40-6244	
1µm	Blue	20 grams	40-6128	40-6243	40-1-6301
3µm	Green	5 grams	40-6152	40-6247	
3µm	Green	20 grams	40-6142	40-6246	40-1-6303
6µm	Yellow	5 grams	40-6172	40-6250	
6µm	Yellow	20 grams	40-6162	40-6249	40-1-6305
9µm	Deep Red	5 grams	40-6192	40-6253	
9µm	Deep Red	20 grams	40-6182	40-6252	40-1-6307
15µm	Brown	5 grams	40-6212	40-6256	
15µm	Brown	20 grams	40-6202	40-6255	40-1-6309

* This product is gray in color, with color coded packaging.

Type	Quantity	Catalog Number
MetaDi® Fluid (water soluble)	16 oz. (0.47ℓ)	40-6016
	32 oz. (0.95ℓ)	40-6032
	85 oz. (2.5ℓ)	40-6064-085
Polishing Oil	1 gal. (3.8ℓ)	40-8142-128
AutoMet® Lapping Oil	6 oz. (0.18ℓ)	60-3250-006
	1 gal. (3.8ℓ)	60-3250-128
Applicator Bottle	8 oz. (0.24ℓ)	60-3255
Spray Pump Nozzle	for 8 oz. (0.24ℓ) MetaDi® Bottles	40-6650

Buehler continuously makes product improvements; therefore, technical specifications are subject to change without notice.
For a complete listing of Buehler equipment and consumables, please refer to our Buehler Consumables and Equipment Buyer's Guides.

BUEHLER ANALYST® SECTION 7



BUEHLER

BUEHLER®, a division of Illinois Tool Works Inc.
– Worldwide Headquarters
41 Waukegan Road
Lake Bluff, Illinois 60044-1699 USA
Tel: (847) 295-6500 • Fax: (847) 295-7979
Sales: 1-800-BUEHLER (1-800-283-4537)
www.buehler.com
Email: info@buehler.com



BUEHLER GmbH - European and MESA Headquarters
In der Steele 2 • 40599 Düsseldorf
Telefon: (49) 211 974100 • Telefax: (49) 211 9741079
www.buehler-met.de
Email: info@buehler-met.de

BUEHLER FRANCE
Téléphone: 0800 89 73 71
Télécopie: 0800 88 05 27
www.buehler.fr
Email: info@buehler.fr

BUEHLER UNITED KINGDOM
Telephone: 0800 707 6273
Fax: 0800 707 6274
www.buehler.co.uk
Email: sales@buehler.co.uk

BUEHLER CANADA
10 Carlow Court, Unit #2
Whitby, Ontario L1N 9T7
Telephone: (905) 430-4684
Fax: (905) 430-4647
Sales Telephone: 1-800-268-3593
Email: info@buehler.ca

BUEHLER, ASIA-PACIFIC
5/F Vogue Centre
696 Castle Peak Road
Lai Chi Kok, Kowloon
Hong Kong, SAR, China
Telephone: (852) 2307 0909
Fax: (852) 2307 0233