

KEMET SPECIAL POLISHING ABRASIVES

Polishing Alumina

For use on most materials in polishing stages.

Alumina Powder

Micron	Size	Code
Gamma 0.04	1kg	600251
Alpha 0.3	1kg	600252
Alpha 1.0	1kg	600253

Aluminium Oxide & Silicon Carbide

For smoothing operations.

Aluminium Oxide Powder

Micron	Size	Code
3	5kg	361607
5	5kg	361618
9	5kg	361555
12.8	5kg	361510
17	5kg	361619
23	5kg	361554
29	5kg	361620

Silicon Carbide Powder

For lapping of Petrographic Material.

Available in six grit sizes.

Silicon Carbide Powder

Grit	Size	Code
180	5kg	361541
220	5kg	361531
320	5kg	361617
400	5kg	361512
600	5kg	361563
1000	5kg	361535

Miscellaneous Polishing Suspensions

Various polishing suspensions for use on special applications.

Description	Micron	Size	Code
Col-K Colloidal Silica Suspension for use on most materials at polishing stage.	0.06	5 litres	600212
		20 litres	600204
Alumina Suspension No.1	0.1	1 litre	600711
Alumina Suspension No.2	0.7	1 litre	600712
Alumina Suspension No.3	0.3	1 litre	600713



Diamond Products

Kemet Diamond Products are available in Standard grade, manufactured with Monocrystalline Diamond Powder, or in our SUPERIOR Premier grade, manufactured with Polycrystalline Diamond Powder. For Kemet Standard and Premier Grades only the highest quality virgin Diamond Powder is used, which must satisfy two important criteria - shaping and grading.

Shape. Our years of experience have established that multi-faceted 'blocky' shaped crystals produce the optimum cutting action of the diamond whilst maintaining a long life.

Grading. The exceptionally close grading standards developed by us exceed many international standards and guarantee Kemet Diamond Products are manufactured to the closest tolerances.

Quality Control. Microscopic and computer analysis of the Diamond Powder ensures that it is exactly the correct grading and shape to maximise cutting performance. Once the quality of the Diamond Powder has been accepted, it is suspended in the appropriate chemical carrier using the latest manufacturing technology. Microscopic examination takes place after manufacture to check that the diamond particles have been properly suspended in the chemical carrier and that each diamond particle is physically separated from the other diamond particles to prevent scratching due to particle agglomeration.



Kemet Standard Grade

Kemet Standard Grade is manufactured with quality Monocrystalline Diamond Powder, matching the shape and size required to offer rapid stock removal and quality surface finish.

Kemet Premier Grade

The spherical 'blocky' shape of Polycrystalline Diamond contains a greater number of cutting facets than Monocrystalline Diamond, giving significant improvements in performance.

- Highest material removal rates.
- Finest surface finish.
- Reduced sub-surface damage.
- Particularly recommended for polishing ceramics, sintered materials, and composites containing different materials.



Kemet Diamond Products and Lapping Plates are manufactured by **Kemet International Ltd** whose quality system is registered by BSI. BSI Certificate of Registration No. Q 05919
BS EN ISO 9001 : 2000

Diamond Compound

Water soluble diamond compound available in two types: **CM** and **CP**.

Type CM

	5g	10g	20g
Micron	Code	Code	Code
1/10	115000	115040	115010
1/4	115001	115041	115011
1/2	115002	115042	115012
1	115003	115043	115013
3	115004	115044	115014
6	115005	115045	115015
9	115006	115046	115016
15	115007	115047	115017
25	115008	115048	115018
45	115009	115049	115019

Standard grade
high concentration
containing
Monocrystalline
Diamond Powder.
*Supplied in 5g
Applikators,
10g or 20g
syringes.*



Type CP

	5g	10g	20g
Micron	Code	Code	Code
1/10	115020	115050	115030
1/4	115021	115051	115031
1/2	115022	115052	115032
1	115023	115053	115033
3	115024	115054	115034
6	115025	115055	115035
9	115026	115056	115036
15	115027	115057	115037
25	115028	115058	115038
45	115029	115059	115039

Premier
grade
high concentration
containing
Polycrystalline
Diamond Powder.
*Supplied in 5g
Applikators,
10g or 20g
syringes.*



Diamond Compound 10g Applicator Stick

	10g
Micron	Code
1/10	113170
1/4	113171
1	113173
3	113174
6	113175
8	113176
15	113184

Water soluble, stick diamond
compound manufactured with
Monocrystalline Diamond
Powder. Allows easy application
of diamond to any lapping,
grinding or polishing surface
without the need for spatulas or
manual application.

Diamond Suspension

Low viscosity, high concentration, water (W) or oil (O) soluble suspensions available in two types: **WM** or **OM** Standard grade, containing monocrystalline diamond powder and **WP** or **OP** Premier grade containing polycrystalline diamond powder.

- Uniform suspension of diamond particles.
- No agitation required.
- Suitable for dispensing by Kemet Electronic Dispenser or alternative systems.

Types OM and OP available in 400g bottles with trigger spray.

Types WM & WP available in 400g bottles with trigger spray.



Type WM

Water Based Monocrystalline

400g	
Micron	Code
1/10	219001
1/4	219002
1/2	219003
1	219004
3	219006
6	219008
9	219009
15	219011
25	219012
45	219013

Type WP

Water Based Polycrystalline

400g	
Micron	Code
1/10	220001
1/4	220002
1/2	220003
1	220004
3	220006
6	220008
9	220009
15	220011
25	220012

Type OM

Oil Based Monocrystalline

400g	
Micron	Code
1/10	216321
1/4	216323
1/2	216322
1	216324
3	216326
6	216328
9	216329
15	216331
25	216332
45	216333

Type OP

Oil Based Polycrystalline

400g	
Micron	Code
1/10	216341
1/4	216342
1/2	216343
1	216344
3	216346
6	216347
9	216349
15	216350
25	216351
45	216352

Diamond Spray

Micron	Code
1/10	116000
1/4	116001
1/2	116002
1	116003
3	116004
6	116005
9	116006
15	116007

Water soluble spray manufactured with **monocrystalline** diamond powder.

Supplied in 100g Pump-up Spray Dispenser



Lubricating Fluid

Type R OS2:

A low viscosity odourless oil-based fluid for use where water is not permitted.

Type GW2:

A low viscosity water-based fluid specially developed for use with Kemet Diamond Suspension, particularly when used with Kemet Lapping Plates.

Type Blue:

Improves cutting and polishing performance. Can be used on polishing cloths or Kemet plates.

	Type R OS2	Type GW2	Type Blue
Size	Code	Code	Code
1 litre	301511	301105	301158
2.5 litres	301512	301108	301156
5 litres	301141	301107	301159
450ml (Trigger Spray)	301513	301514	301200



KEMET POLISHING CLOTHS

Kemet Chemo-textile Cloths

Manufactured to the highest standards with accurately controlled uniform thickness. Self-adhesive, and available in medium (PSU-M), hard (PSU-H) and extra hard (PAD-K) formats. Chem Cloth is also available for Chemo-mechanical Polishing.

Chemo-textile Cloths.

PSU-M / PSU-H: These medium and hard chemo-textile cloths are for smoothing and polishing operations. Commonly used with Kemet Diamond Compound 14 micron and finer.

PAD-K: The ultra-hard chemo-textile cloth used where fast cutting is needed. Used with Kemet Diamond Compound 25 micron and finer. Also available perforated.

Pack of 10	75mm dia	150mm dia	200mm dia	250mm dia	300mm dia	380mm dia
Type	Code	Code	Code	Code	Code	Code
PSU-M	341021	341007	341008	341009	341010	341011
PSU-H	341050	341051	341052	341053	341054	341055
PAD-K	341037	341020	341017	341028	341039	341024

Kemet Silk-Type Cloths

Kemet silk-type cloths have been developed for finishing metal specimens and components. The five types available are **MSFL, MSF, MSR, MST** and **ULP**.

Silk Type Cloths.

- MSFL:** Will polish metal flat, and to a mirror finish. Best results are obtained when used with Kemet Diamond Compound or Diamond Suspension 3 micron and finer. Water resistant adhesive (oil resistant available).
- MSF:** Similar to MSFL, but with a thicker, softer adhesive backing and plastic barrier which is resistant to most fluids.
- MSR:** Similar to MSFL with rigid plastic backing.
- MST:** An extra hard, rigid silk cloth for increased cutting action.
- ULP:** A heavy duty nylon pad for high stock removal.



Pack of 10	150mm dia	200mm dia	250mm dia	300mm dia	380mm dia
Type	Code	Code	Code	Code	Code
MSFL	341751	341752	341754	341755	341756
MSF	341741	341742	341747	341744	341745
MSR	341701	341702	341707	341704	341705
MST	341761	341762	341764	341763	341765
Pack of 5 ULP	-	341971	341972	341973	-

Kemet Nap Type Cloths

For final polishing stages of preparation, Kemet Nap Type Cloths are available with a range of softness and nap length.

They give a more gentle polish, and are ideal for softer specimens and components. All cloths are self-adhesive unless marked 'plain'.



Type	Code
NMH	341236
Selvyt SR	341305

Nap Type Cloths Plain (Roll Stock)

Selvyt: Supplied on a 1400mm wide roll, priced per metre length.

NMH: Supplied on a 50" wide roll, priced per yard length.

Pack of 10	150mm dia	200mm dia	250mm dia	300mm dia	380mm dia
Type	Code	Code	Code	Code	Code
NFC	341207	341208	341225	341210	341211
MBL	341721	341722	341726	341724	341725
MRE	341711	341712	341716	341714	341715
NSH-B	341256	341257	341246	341203	341243
NLH	341241	341205	341247	341206	341248
NMH	341222	341223	341237	341224	341221
Chem H	341779	341782	341783	341784	341865

NFC: Synthetic flock sprayed on cotton carrier. Can be used with 1 micron Kemet Diamond Compound after a smoothing operation on ASF to produce a mirror finish on soft materials.
Colour: Green.

MBL: Synthetic flock sprayed on cotton carrier. Used with 3 micron Kemet Diamond Compound after 6 micron ASF-AW stage.
Colour: Black.

MRE: Synthetic flock sprayed on a flexible waterproof carrier. A more heavy duty cloth for use with 6 micron Kemet Diamond Compound and finer.
Colour: Red.

NSH-B: A short nap cloth with woven backing used for metallographic and some optical polishing operations. Commonly used with Kemet Diamond Compound.
3 Micron and finer.
Colour: Pink.

NLH: A longer, stiffer nap cloth. Commonly used with 6 micron Kemet Diamond compound or finer.
Colour: Cream.

NMH: A napped cloth with uni-directional fibres bonded to a cotton twill backing. A durable, wear resistant cloth. Commonly used with 6 micron Kemet Diamond compound or finer.
Colour: Light Brown.

Selvyt SR A cotton cloth of medium nap with a single pile. Available only as non-adhesive.
Colour: Cream.

Chem H For use with a chemical mechanical polishing process with colloidal silica suspension.