

TECHNODIAMANT

Diamond paste



Diamond pastes are available in 5 grams syringes and 10 gram pots. Pastes are also available in larger packs upon request.

Paste carrier

Grit	Carrier
100, 80, 50, 40, 30, 25	Cast iron, bronze, copper or aluminium (according to the hardness of the material to be ground)
14, 10	As above, plus hardwood and plastic
8, 6	As 10 and 14, plus hard felt
3, 2	Softer types of wood and felt
1	Felt, soft paper, any softer types of wood
1/4	Soft felt and the like

In general the paste carrier must be softer than the material to be ground and must offer sufficient resistance to the grinding pressure.

Diaspeed (diamond polishing paste)

Diaspeed diamond polishing pastes are supplied in two types:

Diaspeed-A (water soluble)

This diamond paste, with very high adhesion is most suitable for use at higher rotational speeds. Before spreading, the paste requires to be thinned down with water or solvents such as carbon tetrachloride or trichloorethylene.

Diaspeed-C (soluble in oil)

This diamond paste, with less adhe-

sion than Diaspeed-A, is capable of being very finely spread. The paste is soluble in oil (e.g. olive oil).

Diaspeed-C is particularly suited for hand polishing or for machine polishing with a to and fro movement. This paste may also be thinned down with solvents listed under Diaspeed-A.

Both types can be supplied in normal and highly concentrated versions.

Diamond grit size

Diamond grain sizes are shown in microns (0.001 mm) or mesh size. In order to avoid confusion, all pastes are colour coded.

No.	Spread	Color	Applications
1/4	0 - 0.5 μ	grey	Very fine polishing of metal alloys. Making structures visible for metallurgical examination.
1	0 - 2 μ	pink	Very fine polishing of carbide and hardened steel. Making structures visible for metallurgical examination.
2	1 - 3 μ	lilac brown	High lustre polishing of carbide, hardened steel and precious stones.
3	1 - 5 μ		
6	4 - 8 μ	yellow	Fine polishing of carbide, steel and precious stones.
8	6 - 10 μ	green mahogany	Removal of scratches in carbide, steel and precious stones.
10	6 - 14 μ		
14	8 - 20 μ	blue orange	As above, as well as stainless steel.
16	10 - 25 μ		
25	20 - 30 μ	red violet	Rapid removal of pits and scratches in rough machined material.
30	20 - 40 μ		
40	30 - 50 μ	purple black	Very rapid removal of grooves and scratches in rough machined material.
50	40 - 60 μ		
80	170/200 mesh	blue/grey red/purple	Removal at a high rate for all material types.
100	140/170 mesh		

Recommended sequence of operation for grinding and polishing:

- Carbide 30-14-3 or 30-8-1
- Hardened steel 40-14-1/4 or 30-8-1/4
- Cast iron, non ferrous metals, glass and plastics 8-3-1/4 or 8-1-1/4