3M™ Diamond Lapping Film 600X Series

Product Description

Our 3M™ Diamond Lapping Films are comprised of tightly graded diamond mineral uniformly coated on a polyester film backing. Enables long abrasive life with a superior finish throughout the life of the product. Available with or without PSA (Pressure Sensitive Adhesive) backing.

Applications

Fiber optic connector processing, flat lapping, roll superfinishing.

Substrates

Ceramics, glass, stone, carbide, composites, exotic alloys and other hard materials.

Key Features

- Long life
- Produces superior surface finish
- Reduces overall process time
- Produces high yields
- Eliminates slurries
- Consistent results throughout life of product
- Used in many applications and on a multitude of machines

3M I.D. Number

Backing Thickness	1 mil	1.5 mil	2 mil	3 mil	3 mil	3 mil	3 mil
Plain back	631X	641X	651X	660XV	661X	662XW	663X
PSA back	n/a	n/a	n/a	n/a	668X	666XW	664X

Converted Forms

Sheets, Discs and Rolls.

Maximum width 12 in.

Backing

Polyester Film

Nominal thickness: 1 mil, 1.5 mil, 2 mil, 3 mil

Actual thickness: .92 mil, 1.46 mil, 1.97 mil, 2.97 mil, (± 0.05)

Ultimate tensile strength - 26,500 psi (typical)

Mineral Size Grading Chart

Micron Grade (nominal)	Color
0.1	Green
0.5	White
1.0	Lavender
1.5	Light Green
3.0	Pink
6.0	Brown
9.0	Blue
15.0	Orange
20.0	Burgundy
30.0	Green
45.0	Amber
60.0	Amber

Bonding Resins

3M™ Diamond Lapping Films 631X, 641X, 651X and 661X/668X: Standard resin

3M™ Diamond Lapping Films 660XV, 662XW/666XW: Softer, tougher resin system with higher diamond content

3M™ Diamond Lapping Films 663X/664X: Hardest resin

Storage and Shelf Life

Recommended Storage Conditions:
Temperature 50 - 90°F (10 - 32°C)
Relative humidity 30 - 70%
(There is no degradation with time. It is recommended that product be used within 24 months of purchase.)

Number of Uses

The number of uses are dependent on equipment, process parameters and materials processing.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for Health and Safety Information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-251-8634. Address correspondence to: 3M Electronics Markets Materials Division, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55144-1000. Our fax number is 651-778-4244 or 1-877-369-2923.
In Canada, phone: 1-800-364-3577.
In Puerto Rico, phone: 1-787-750-3000.
In Mexico, phone: 52-70-04-00.

Important Notice

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture at the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**

3M

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