



ProFilm DU099D Ultraviolet Dicing Tape

ProFilm™ DU099D is a protective surface film designed to deliver consistent, precise and repeatable wafer production yields. Enhanced with superior ultraviolet adhesive coating technology, ProFilm™ DU099D offers Total Thickness Variation (TTV) control, expandable base film, and a special low extractable release liner that significantly reduces silicon residue.

- Specially formulated polyolefin film for unparalleled protection
- Coated with stable UV curable pressure-sensitive adhesive
- Features expandable chloride-free base film
- Easy die removal post UV light exposure
- Film minimizes or eliminates die rocking and other picking defects
- Film is transparent and untinted to help human and electronic vision die defect recognition

CONSTRUCTION

ProFilm™ DU099D is constructed in three layers:

Polyolefin Base Film (3.5Mils)
UV Sensitive Adhesive (0.38Mils)
Release Film (0.92Mils)

CONFIGURATIONS

ProFilm™ DU099D is available in a variety of configurations. Standard widths include 200mm, 230mm, 250mm, 275mm, 300mm, 330mm and 400mm. Rolls are provided in splice-free lengths of 100m on a 3" I.D. plastic core. Both custom widths and lengths may be available by special request. ProFilm™ DU099D rolls are polybag wrapped and individually boxed.

SHELF LIFE AND STORAGE

ProFilm™ DU099D should be stored in a climate controlled environment where conditions do not exceed 27°C +/- 10° and 30% RH +/- 20%. This product is sensitive to UV light, so store away from heat and direct sunlight. If stored as recommended, the product will yield a shelf life of 12 months from the date of manufacture found on the core label.

ProFilm DU099D Material Properties

¹ Bond Test on Stainless Steel Wafer at 180° peel angle and 300mm/min peel and stretching speed.

² UV exposure of 300 mJ/cm²

The values presented for this product are typical laboratory data and may be changed without notice.

Property	Typical Value	Test Method / Standard
Adhesive Strength ¹	570g min before UV (20 min.) 20-100g/25mm after UV ²	ASM D 1000
Tensile Strength	15 N/mm ² MD 9 N/mm ² MD	ASTM D 882
Elongation	>600% MD >600% TD	ASTM D 882
Thickness w/o Release Liner	99µ (3.9 mils)	ASTM D 1005
Temperature Resistance	<5 min. @ 50-60°C >5 min. @ 40-45°C	-

The below is typical data and should not be used for any specification purposes.

DU099D Material Ionics Data										
Fluoride	Chloride	Bromide	Nitrate	Phosphate	Sulfate	Sodium	Ammonium	Potassium	Magnesium	Calcium
<0.025	0.231	<0.025	<0.025	<0.025	0.05	0.459	<0.025	0.056	<0.025	0.131