



DONKSESTENWEG 13
B-2930 BRASSCHAAT
BELGIUM

POLYGUARD 5000 (Polyester film for Lamination with Polyurethane)

POLYGUARD

POLYGUARD is a new family of POLYESTER based films for application to glass and transparent plastic sheet.

POLYGUARD products are either single Polyester films, or a combination of a polyurethane interlayer film and a high-impact resistant film such as *Polycarbonate* or *PET*.

POLYGUARD products are laminated to glass or plastics like Polycarbonate to provide *scratch resistance* or *spall and shatter resistance*.

POLYGUARD products are laminated to glass or plastic sheet by means of autoclaving.

POLYGUARD 5000

POLYGUARD 5000 is a specially prepared **Scratch Resistant Polyester film**
Standard format is a thickness of .007inch (0.175mm), but the product can be manufactured in thicknesses from .004 inch to .015inch (0.100 to 0.380mm)

POLYGUARD 5000 has been specially formulated to ensure excellent adhesion with a Polyurethane interlayer film when laminating to glass or Polycarbonate.

POLYGUARD 5000 will pass automotive standards boil tests without delaminating. Scratch resistance of the PET film is excellent,

POLYGUARD 5000 can be laminated (using a PU interlayer) to Glass or uncoated PC sheet to provide a superior scratch resistant top layer without any reduction in the physical properties of the PC sheet.

POLYGUARD 5000 has been tested for impact resistance and passes a 2.2 kg drop ball test at temperatures from -20°C to +40°C. (Note: Film laminated with PF-2300 Polyurethane interlayer)

POLYGUARD 5000 can be laminated to glass or PC sheet with PU interlayers at very low temperatures95 - 120°C.

APPLICATION DATA: POLY**GUARD** 5000 is usually produced with a protective RELEASE FILM ON ONE OR BOTH SIDES OF THE POLYESTER. THE RELEASE FILM MUST BE REMOVED PRIOR TO LAMINATING.

TYPICAL PROPERTIES OF POLY**GUARD** 5000
AFTER LAMINATING

Light transmission	89-94%
Haze	< 1.0%
Abrasion resistance ASTM D-1044 500g CS-10wheel 100 cycles	<3.0% haze
Boil Test (2 hours)	No delamination

POLY**GUARD** 5000 is available in rolls of 200 lin meters and a width of 1500 mm.