

Technical Data Sheet

Type: Aliphatic polyether based Thermoplastic Polyurethane (TPU) specifically formulated to be used as an adhesive interlayer film. It is an excellent general purpose polymer for all optical aliphatic applications.

Features: This polymer works over a broad range of processing temperatures with excellent laminating results

Uses: Adhesive interlayer for glass-clad polycarbonate without a surface primer.

| Physical Properties | Value (Metric) | Unit | Test Method |
|---------------------|----------------|--------------|------------------------------|
| Specific Gravity | 1.08 | g/cm3 | ISO 2781 / ASTM D-792 |
| Tensile Strength | 48 / 6961 | MPa / psi | ISO 527-2 / ASTM D-412 |
| Ultimate Elongation | 500 | % | ISO 527-2 / ASTM D-412 |
| Tensile Stress at: | | | ISO 527-2 / ASTM D-412 |
| - 50 % Elongation | 2.6 / 377 | MPa / psi | ISO 527-2 / ASTM D-412 |
| - 100 % Elongation | 4.5 / 652 | MPa / psi | ISO 527-2 / ASTM D-412 |
| - 300 % Elongation | 11 / 1595 | MPa / psi | ISO 527-2 / ASTM D-412 |
| Tear Strength | 52 / 300 | kN/m / lb/in | ISO 34-1B / ASTM D-624 Die C |
| TMA Peak | 88 | °C | Lubrizol DSC |
| TMA Range | 65-130 | °C | Lubrizol DSC |
| Transmission | 85 to 95 | °C | ASTM D1003 |
| Refractive Index | 1.4962 | °C | ASTM D542-95 |

ASTM D412 grip separation rate – 20 inches per minute.
0.050" film thickness between two pieces of 1/8" glass.

Supply Form and Standard Packaging

- ESTANE® AG 8451-E is supplied in pellet form and packaged in 25 kg bags.

For further information refer to Lubrizol Advanced Materials processing guides.

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