## Surlyn® Industrial Resins Property Grid

(Grade Positioning Chart and Properties Guide)

### As Neutralization Increases
- Yield point
- Tensile strength
- Stiffness
- Hardness
- Abrasion resistance
- yellowness
- Moisture uptake

### As % Acid Increases
- Decreases:
  - Adhesion
  - Haze
  - Freeze point
  - Tear strength

- Increases:
  - Yield point
  - Tensile strength
  - Stiffness
  - Hardness
  - Abrasion resistance
  - % Elongation
  - Freeze point
  - Haze

### Zinc Grades (9xxx Series)
- Better flow
- Higher impact strength
- Lower moisture uptake
- Better tear strength
- Better paint adhesion

### Sodium Grades (8xxx Series)
- Lower haze
- Higher stress crack resistance
- Harder
- Stiffer
- Intermediate between Sodium and Zinc grades on moisture uptake

### Lithium Grades (7xxx Series)
- 7920 (1.1)
- 9520 (1.1)
- 9650 (5)
- 8527 (1.3)
- 8945, PC350 (4.5)
- 9440 (3.0)
- 9940 (2.6)
- 9721 (1.0)
- 9730 (1.6)
- 9150 (4.5)
- 8140 (2.6)
- 9120 (1.3)

---

DuPont™ Surlyn®
RESINS

---

Properties Grid for Selected Industrial Grades of Surlyn®