

# NA940

## Low Density Polyethylene Film Extrusion Grade

| Grade      | Additive packages             | Applications    |
|------------|-------------------------------|-----------------|
| NA9400.000 | Slip (None), Antiblock (None) | Heavy Duty film |

### PRODUCT DESCRIPTION

NA940 is designed for heavy duty film applications. Superior puncture resistance combined with excellent impact properties make NA940 an ideal choice for bags used to package fertilizer, peat moss, agricultural and construction materials.

| Properties*                               | Test Method | Metric Units  |                   | English       |                   |
|---|-------------|---------------|-------------------|---------------|-------------------|
|   |             | Typical Value | Unit              | Typical Value | Unit              |
| Melt Flow Index                           | ASTM D1238  | 0.25          | g/10 min.         | 0.25          | g/10 min          |
| Density (23°C)                            | ASTM D792   | 0.918         | g/cm <sup>3</sup> | 0.918         | g/cm <sup>3</sup> |
| Vicat Softening Point                     | ASTM D 1525 | 90            | °C                | 90            | 194 °F            |
| <b>Film Properties<sup>1</sup></b>        |             |               |                   |               |                   |
| Dart Drop Impact Strength F <sub>50</sub> | ASTM D1709  | 220           | g                 | 220           | g                 |
| Tensile Strength                          |             |               |                   |               |                   |
| MD  | ASTM D882   | 21            | MPa               | 3000          | psi               |
| TD  | ASTM D882   | 19            | MPa               | 2800          | psi               |
| Elmendorf Tear Strength                   |             |               |                   |               |                   |
| MD  | ASTM D1992  | 220           | g                 | 220           | g                 |
| TD  | ASTM D1992  | 200           | g                 | 200           | g                 |
| Elongation                                |             |               |                   |               |                   |
| MD  | ASTM D882   | 300           | %                 | 300           | %                 |
| TD  | ASTM D882   | 540           | %                 | 540           | %                 |
| 1 % Secant Modulus                        |             |               |                   |               |                   |
| MD  | ASTM E111   | 165           | MPa               | 24000         | psi               |
| TD  | ASTM E111   | 186           | MPa               | 27000         | psi               |
| Flexural Modulus                          | ASTM D790   | 234           | MPa               | 34000         | psi               |
| Hardness Shore D                          | ASTM D2240  | 50            |                   | 0             |                   |

\* Typical Value of Properties which can vary with in specification limits and are not to be construed as specifications.

<sup>1</sup> Film produced in a 3½ " (89mm) blown film line, commercials available 8" (203mm) die, 430 °F (221 °C) melt extrusion temperature 2:1 BUR, 2 mil ( 51 micron) gauge, 0.0025 " due gap at 170 lb/hr.

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