

## Technical Data Sheet

### *Alathon* L4434



High Density Polyethylene

#### Product Description

*Alathon* L4434 is a medium molecular weight high density copolymer for use in blown film applications. Typical applications include blown film over pouches.

|                          |                                                                           |
|--------------------------|---------------------------------------------------------------------------|
| <b>Application</b>       | Bags & Pouches; Food Packaging Film; Lamination Film; Secondary Packaging |
| <b>Market</b>            | Flexible Packaging                                                        |
| <b>Processing Method</b> | Blown Film                                                                |
| <b>Attribute</b>         | General Purpose; Good Organoleptic Properties; High Density; Low Gel      |

| Typical Properties               | Nominal Value | English Units     | Nominal Value | SI Units          | Test Method |
|----------------------------------|---------------|-------------------|---------------|-------------------|-------------|
| <b>Physical</b>                  |               |                   |               |                   |             |
| Melt Flow Rate, (190 °C/2.16 kg) | 0.34          | g/10 min          | 0.34          | g/10 min          | ASTM D1238  |
| Density, (23 °C)                 | 0.944         | g/cm <sup>3</sup> | 0.944         | g/cm <sup>3</sup> | ASTM D1505  |
| <b>Film</b>                      |               |                   |               |                   |             |
| Tensile Strength at Break        |               |                   |               |                   |             |
| MD                               | 7450          | psi               | 51.4          | MPa               | ASTM D882   |
| TD                               | 6700          | psi               | 46.2          | MPa               | ASTM D882   |
| Tensile Strength at Yield        |               |                   |               |                   |             |
| MD                               | 3200          | psi               | 22.1          | MPa               | ASTM D882   |
| TD                               | 4000          | psi               | 27.6          | MPa               | ASTM D882   |
| Tensile Elongation at Break      |               |                   |               |                   |             |
| MD                               | 590           | %                 | 590           | %                 | ASTM D882   |
| TD                               | 850           | %                 | 850           | %                 | ASTM D882   |
| Secant Modulus                   |               |                   |               |                   |             |
| MD                               | 98500         | psi               | 679           | MPa               | ASTM D882   |
| TD                               | 132000        | psi               | 910           | MPa               | ASTM D882   |
| Elmendorf Tear Strength          |               |                   |               |                   |             |
| MD                               | 49            | g                 | 49            | g                 | ASTM D1922  |
| TD                               | 1100          | g                 | 1100          | g                 | ASTM D1922  |