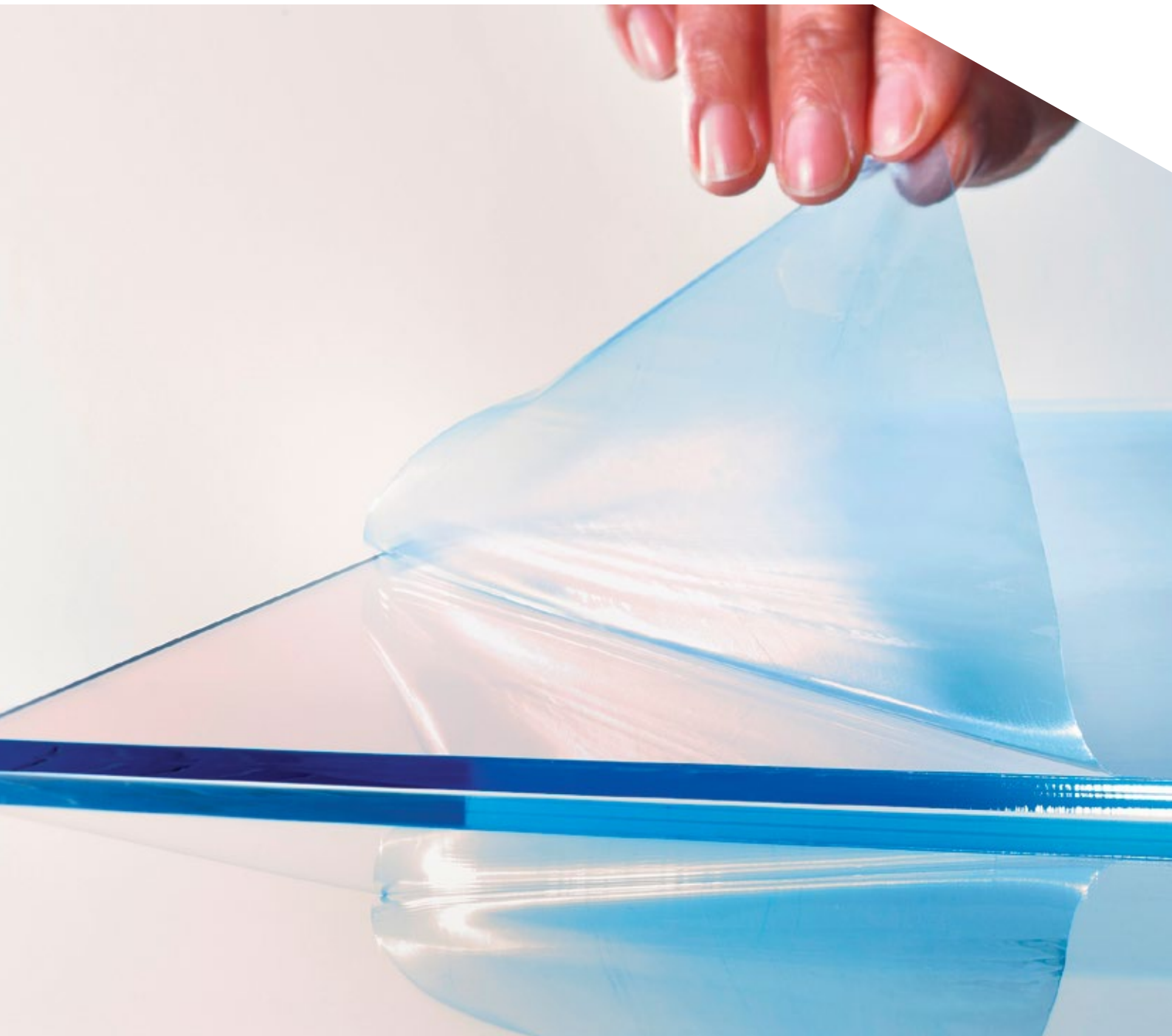


# Polyethylene grades used in film application

Product Selection Guide - Europe



# Product Selection Guide - Polyethylene Europe

## Grades used in film applications

| Grade Name                      | Typical Resin Properties                    |                                          |                                             |                          |                          |                                                      |                                     |                                                  |                                                                                     | Typical Customer Applications |                       |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          |                    |               |               |                            |                  |                    |                        |                 |                          |  |  |
|---------------------------------|---------------------------------------------|------------------------------------------|---------------------------------------------|--------------------------|--------------------------|------------------------------------------------------|-------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------|-----------------------|------------------|-------------------|----------|-------------------------|----------------|----------------------|-----------------------------------|---------------------------|--------------------------|---------------------|----------------------------------------|--------------------------------------------|-----------------|------------------|--------------------------|--------------------|---------------|---------------|----------------------------|------------------|--------------------|------------------------|-----------------|--------------------------|--|--|
|                                 | MFR (190 °C/2,16 kg)<br>[g/10 min] ISO 1133 | MFR (190 °C/5 kg)<br>[g/10 min] ISO 1133 | MFR (190 °C/21,6 kg)<br>[g/10 min] ISO 1133 | Density [g/cm³] ISO 1183 | Melting Temperature [°C] | Vicat Softening Temp. VST/A (10 N)<br>[°C] ISO 306/A | Tensile Modulus [MPa] ISO 527-1, -2 | Tensile Strength at Yield [MPa]<br>ISO 527-1, -2 | Additivation (AO = Antioxidant,<br>AB = Antiblock, S = Slip,<br>P = Processing Aid) | - Blown Film Extrusion        | - Cast Film Extrusion | - Oriented Films | - Heavy duty bags | - Liners | - Refuse sacks and bags | - Carrier bags | - Agricultural films | - Building and construction films | - Heavy duty shrink films | - Collation shrink films | - Fine shrink films | - Food packaging FFS films and<br>bags | - Packaging films for sanitary<br>articles | - Freezer films | - Sanitary films | - Embossed release films | - Lamination films | - Label films | - Cling films | - Surface protection films | - Sealing layers | - Cereal packaging | - Silicon coated films | - Stretch hoods | - Blend partner for LDPE |  |  |
| Lupolen 1840 D                  | 0.25                                        |                                          |                                             | 0.919                    | 108                      | 93                                                   | 200                                 | 9                                                |                                                                                     | •                             |                       |                  | •                 | •        | •                       |                | •                    | •                                 | •                         |                          |                     |                                        |                                            |                 |                  |                          |                    |               |               |                            |                  |                    | •                      |                 |                          |  |  |
| Lupolen 2420 D                  | 0.25                                        |                                          |                                             | 0.923                    | 110                      | 96                                                   | 260                                 | 10                                               |                                                                                     | •                             |                       |                  | •                 | •        | •                       | •              | •                    | •                                 | •                         |                          |                     |                                        |                                            |                 |                  |                          |                    |               |               |                            |                  |                    |                        |                 |                          |  |  |
| Lupolen 2420 F                  | 0.75                                        |                                          |                                             | 0.923                    | 111                      | 96                                                   | 260                                 | 11                                               |                                                                                     | •                             |                       |                  |                   | •        | •                       |                | •                    |                                   | •                         |                          |                     | •                                      | •                                          | •               | •                | •                        |                    |               |               |                            | •                |                    | •                      |                 |                          |  |  |
| Lupolen 2420 F Plus             | 0.75                                        |                                          |                                             | 0.923                    | 111                      | 96                                                   | 260                                 | 11                                               |                                                                                     | •                             |                       |                  |                   |          |                         | •              | •                    |                                   |                           | •                        |                     | •                                      | •                                          | •               | •                | •                        |                    |               |               | •                          | •                |                    | •                      |                 |                          |  |  |
| Lupolen 2426 F                  | 0.75                                        |                                          |                                             | 0.924                    | 111                      | 96                                                   | 260                                 | 11                                               | AB, S                                                                               | •                             |                       |                  |                   |          |                         |                |                      |                                   |                           | •                        |                     | •                                      | •                                          | •               | •                | •                        |                    |               |               |                            | •                | •                  |                        | •               |                          |  |  |
| Lupolen 2420 H                  | 1.9                                         |                                          |                                             | 0.924                    | 111                      | 94                                                   | 260                                 | 11                                               |                                                                                     | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          | •                   | •                                      | •                                          | •               | •                | •                        |                    |               |               |                            | •                | •                  |                        |                 |                          |  |  |
| Lupolen 2426 H                  | 1.9                                         |                                          |                                             | 0.924                    | 111                      | 94                                                   | 260                                 | 11                                               | AB, S                                                                               | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          | •                   | •                                      | •                                          | •               | •                |                          |                    |               |               | •                          | •                |                    |                        |                 |                          |  |  |
| Lupolen 2420 K                  | 4                                           |                                          |                                             | 0.924                    | 111                      | 92                                                   | 260                                 | 11                                               |                                                                                     | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        | •                                          |                 |                  |                          |                    |               |               | •                          | •                |                    |                        |                 |                          |  |  |
| Lupolen 2426 K                  | 4                                           |                                          |                                             | 0.924                    | 111                      | 92                                                   | 260                                 | 11                                               | AB, S                                                                               | •                             | •                     |                  |                   |          |                         |                |                      | •                                 |                           |                          | •                   | •                                      | •                                          |                 |                  |                          |                    |               |               |                            | •                | •                  |                        |                 |                          |  |  |
| Lupolen 3010 D                  | 0.25                                        |                                          |                                             | 0.927                    | 114                      | 102                                                  | 300                                 | 13                                               |                                                                                     | •                             |                       |                  | •                 | •        |                         | •              |                      |                                   | •                         |                          |                     | •                                      | •                                          |                 |                  | •                        |                    |               |               |                            |                  |                    |                        |                 |                          |  |  |
| Lupolen 3020 F                  | 0.9                                         |                                          |                                             | 0.927                    | 114                      | 100                                                  | 300                                 | 12                                               |                                                                                     | •                             |                       |                  |                   |          |                         |                |                      |                                   |                           |                          | •                   | •                                      | •                                          | •               |                  |                          | •                  |               |               |                            | •                | •                  |                        |                 |                          |  |  |
| Lupolen 3026 F                  | 0.9                                         |                                          |                                             | 0.927                    | 114                      | 100                                                  | 300                                 | 12                                               | S                                                                                   | •                             |                       |                  |                   |          |                         |                |                      |                                   |                           |                          | •                   | •                                      | •                                          | •               |                  |                          |                    |               |               |                            | •                | •                  |                        |                 |                          |  |  |
| Lupolen 3020 H                  | 2                                           |                                          |                                             | 0.928                    | 114                      | 100                                                  | 300                                 | 13                                               |                                                                                     | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          |                     | •                                      | •                                          | •               |                  | •                        |                    |               |               |                            | •                | •                  |                        |                 |                          |  |  |
| Lupolen 3026 H                  | 2                                           |                                          |                                             | 0.928                    | 114                      | 100                                                  | 300                                 | 13                                               | S                                                                                   | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          |                     | •                                      | •                                          | •               |                  | •                        |                    |               |               |                            | •                | •                  |                        |                 |                          |  |  |
| Lupolen 3020 K                  | 4                                           |                                          |                                             | 0.928                    | 114                      | 97                                                   | 300                                 | 13                                               |                                                                                     | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          |                     | •                                      | •                                          |                 |                  |                          |                    |               | •             | •                          |                  | •                  | •                      |                 |                          |  |  |
| Lupolen 3026 K                  | 4                                           |                                          |                                             | 0.928                    | 114                      | 97                                                   | 300                                 | 13                                               | AB, S                                                                               | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          | •                   | •                                      | •                                          |                 |                  |                          |                    |               |               |                            | •                | •                  |                        |                 |                          |  |  |
| Lupolen 3220 F                  | 0.9                                         |                                          |                                             | 0.930                    | 117                      | 105                                                  | 430                                 | 14                                               |                                                                                     | •                             |                       |                  |                   |          |                         |                |                      |                                   |                           |                          | •                   |                                        | •                                          | •               |                  |                          |                    |               |               |                            | •                | •                  |                        |                 |                          |  |  |
| Lupolen 3420 J                  | 3                                           |                                          |                                             | 0.934                    | 119                      | 109                                                  | 480                                 | 16                                               |                                                                                     | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          |                     | •                                      |                                            |                 |                  |                          |                    | •             |               | •                          | •                |                    |                        |                 |                          |  |  |
| Lupolen 3426 J                  | 3                                           |                                          |                                             | 0.934                    | 119                      | 109                                                  | 480                                 | 16                                               | AB, S                                                                               | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        | •                                          |                 |                  |                          |                    | •             |               |                            | •                | •                  |                        |                 |                          |  |  |
|                                 |                                             |                                          |                                             |                          |                          |                                                      |                                     |                                                  |                                                                                     |                               |                       |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          |                    |               |               |                            |                  |                    |                        |                 |                          |  |  |
| Lucalen A 2540 D <sup>(1)</sup> | 0.25                                        |                                          |                                             | 0.923                    | 103                      | 85                                                   | 120                                 | 7                                                |                                                                                     | •                             |                       |                  |                   |          |                         |                | •                    |                                   |                           |                          |                     |                                        |                                            | •               |                  |                          |                    |               |               |                            | •                |                    | •                      |                 |                          |  |  |
| Lucalen A 2920 M <sup>(2)</sup> | 7                                           |                                          |                                             | 0.927                    | 96                       | 74                                                   | 90                                  | 6                                                | AO                                                                                  | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          | •                  |               |               |                            | •                |                    |                        |                 |                          |  |  |
|                                 |                                             |                                          |                                             |                          |                          |                                                      |                                     |                                                  |                                                                                     |                               |                       |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          |                    |               |               |                            |                  |                    |                        |                 |                          |  |  |
| Luflexen hyPE 35P FA            | 0.75                                        | 2.5                                      |                                             | 0.936                    | 126                      | 119                                                  | 600                                 | 16                                               | AO                                                                                  | •                             |                       | •                | •                 | •        | •                       | •              | •                    | •                                 |                           |                          | •                   | •                                      | •                                          | •               | •                |                          |                    | •             | •             |                            |                  |                    |                        | •               |                          |  |  |
| Luflexen hyPE 52R FA            | 2.0                                         |                                          |                                             | 0.952                    | 131                      | 126                                                  | 1100                                | 27                                               | AO                                                                                  | •                             | •                     | •                |                   | •        | •                       | •              | •                    | •                                 |                           |                          | •                   | •                                      | •                                          | •               | •                |                          |                    | •             | •             |                            |                  |                    |                        | •               |                          |  |  |
| Luflexen hyPE 56P FA            | 0.75                                        | 2.2                                      |                                             | 0.955                    | 132                      | 129                                                  | 1250                                | 27                                               | AO                                                                                  | •                             |                       | •                | •                 | •        | •                       | •              | •                    | •                                 |                           |                          | •                   | •                                      | •                                          | •               | •                |                          |                    | •             | •             |                            |                  |                    |                        | •               |                          |  |  |
| Lupolen 3721 C                  |                                             | 0.6                                      | 12.5                                        | 0.937                    | 127                      | 121                                                  | 700                                 | 19                                               | AO                                                                                  | •                             |                       |                  | •                 | •        | •                       | •              |                      | •                                 | •                         |                          | •                   |                                        |                                            | •               |                  |                          |                    |               |               |                            |                  |                    |                        | •               |                          |  |  |
|                                 |                                             |                                          |                                             |                          |                          |                                                      |                                     |                                                  |                                                                                     |                               |                       |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          |                    |               |               |                            |                  |                    |                        |                 |                          |  |  |
| Hostalen GC 7260 F2             | 8.0                                         | 23                                       |                                             | 0.960                    | 133                      | 127                                                  | 1450                                | 30                                               | AO                                                                                  | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          | •                  | •             |               |                            |                  | •                  | •                      |                 | •                        |  |  |
| Hostalen GD 9555                |                                             | 3.0                                      | 63                                          | 0.953                    | 131                      | 122                                                  | 1050                                | 25                                               | AO                                                                                  |                               | •                     | •                |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          | •                  |               |               |                            |                  | •                  | •                      |                 | •                        |  |  |
| Hostalen GD 9550 F              |                                             | 3.1                                      | 34                                          | 0.950                    | 131                      | 125                                                  | 1050                                | 25                                               | AO                                                                                  | •                             |                       |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        | •                                          |                 |                  |                          |                    |               |               |                            |                  | •                  | •                      |                 | •                        |  |  |
| Hostalen GF 9055 F              |                                             | 1.8                                      | 24                                          | 0.954                    | 133                      | 127                                                  | 1300                                | 27                                               | AO                                                                                  | •                             |                       |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        | •                                          | •               |                  |                          |                    |               |               |                            |                  | •                  | •                      |                 | •                        |  |  |
| Hostalen GF 9045 F              |                                             | 1.8                                      | 21                                          | 0.946                    | 130                      | 124                                                  | 950                                 | 23                                               | AO                                                                                  | •                             |                       | •                |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          |                    |               |               |                            |                  |                    |                        | •               |                          |  |  |
| Hostalen ACP 9240 Plus          |                                             | 0.2                                      | 6                                           | 0.946                    | 129                      | 123                                                  | 1000                                | 23                                               | AO                                                                                  | •                             |                       |                  | •                 | •        | •                       | •              |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          | •                  | •             |               |                            |                  |                    |                        | •               |                          |  |  |
| Hostalen ACP 9254 Plus          |                                             | 0.3                                      | 8.8                                         | 0.954                    | 133                      | 127                                                  | 1250                                | 27                                               | AO                                                                                  | •                             |                       |                  | •                 | •        | •                       | •              |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          | •                  | •             |               |                            |                  |                    |                        | •               |                          |  |  |
| Hostalen ACP 9255 Plus          |                                             | 0.4                                      | 12                                          | 0.957                    | 133                      | 128                                                  | 1350                                | 29                                               | AO                                                                                  | •                             |                       |                  | •                 | •        | •                       | •              |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          | •                  | •             |               |                            |                  |                    |                        | •               |                          |  |  |
| Hostalen ACP 7740 F2            |                                             | 1.8                                      | 18                                          | 0.948                    | 130                      | 127                                                  | 1000                                | 24                                               | AO                                                                                  | •                             |                       | •                |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          |                    |               |               |                            |                  |                    |                        | •               |                          |  |  |
|                                 |                                             |                                          |                                             |                          |                          |                                                      |                                     |                                                  |                                                                                     |                               |                       |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        |                                            |                 |                  |                          |                    |               |               |                            |                  |                    |                        |                 |                          |  |  |
| Petrothene GA1810               | 1.0                                         |                                          |                                             | 0.918                    | 123                      | 101                                                  | 300                                 | 10                                               | AO                                                                                  | •                             |                       | •                | •                 | •        | •                       |                | •                    | •                                 | •                         |                          |                     | •                                      |                                            | •               |                  |                          | •                  |               | •             | •                          | •                |                    | •                      | •               |                          |  |  |
| Petrothene GA1810T              | 1.0                                         |                                          |                                             | 0.918                    | 123                      | 101                                                  | 300                                 | 10                                               | AO, S, AB                                                                           | •                             |                       | •                | •                 | •        | •                       |                | •                    | •                                 | •                         |                          |                     | •                                      |                                            | •               |                  |                          | •                  |               | •             | •                          | •                |                    | •                      | •               |                          |  |  |
| Petrothene GA1820               | 2.0                                         |                                          |                                             | 0.918                    | 123                      | 98                                                   | 300                                 | 10                                               | AO                                                                                  | •                             | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        | •                                          |                 |                  |                          | •                  |               | •             | •                          | •                |                    |                        | •               |                          |  |  |
| Petrothene GA1832               | 3.2                                         |                                          |                                             | 0.918                    | 123                      | 95                                                   | 300                                 | 10                                               | AO                                                                                  |                               | •                     |                  |                   |          |                         |                |                      |                                   |                           |                          |                     |                                        | •                                          |                 |                  |                          | •                  |               | •             | •                          | •                |                    |                        | •               |                          |  |  |
| Petrothene GA2508               | 0.8                                         |                                          |                                             | 0.925                    | 125                      | 113                                                  | 450                                 | 13                                               | AO                                                                                  | •                             |                       | •                | •                 | •        | •                       |                | •                    |                                   | •                         |                          |                     | •                                      |                                            | •               |                  |                          | •                  |               | •             | •                          | •                |                    | •                      | •               |                          |  |  |

1) Comonomer n-butyl acrylate: 6.5%  
2) Comonomer tert-butyl acrylate: 7%, comonomer acrylic acid: 4%  
Given values are typical properties.

# About us

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