



# Eltex<sup>®</sup> PF6212KE

## Product Technical Information

Eltex<sup>®</sup> PF6212KE is a metallocene LLDPE grade produced in Europe

## Benefits & Features

Eltex<sup>®</sup> PF6212KE is a polyethylene copolymer containing hexene-1 as the comonomer produced with a metallocene catalyst. It offers the following properties:

- Extremely high impact strength
- Excellent optical properties
- Very good bubble stability and extrudability, even at low gauge and narrow die gap
- Low temperature sealing characteristics

Eltex<sup>®</sup> PF6212KE is formulated with antioxidants, slip and antiblock additives and a processing aid. Addition of other polymers, masterbatch and pigments may alter film slip and antiblock performance.

## Applications

Eltex<sup>®</sup> PF6212KE has been developed for use in food packaging and other thin film applications where excellent mechanical and optical performance is required. Eltex<sup>®</sup> PF6212KE offers easy extrudability. We recommend that you consult your INEOS technical representative for further advice on the use of Eltex<sup>®</sup> PF6212KE

| Properties                   | Conditions   | Test Methods | Values    | Units             |
|------------------------------|--------------|--------------|-----------|-------------------|
| <b>Rheological</b>           |              |              |           |                   |
| Melt Flow Rate               | 190°C/2.16Kg | ISO 1133-1   | 1.3       | g/10 min          |
| <b>Physical</b>              |              |              |           |                   |
| Density ISO 1872-1           | 23°C         | ISO 1183-1   | 920       | kg/m <sup>3</sup> |
| <b>Mechanical*</b>           |              |              |           |                   |
| Dart drop impact             | Method A     | ASTM D 1709  | > 1000    | g                 |
| Tensile Stress at Yield      | MD/TD**      | ISO 1184     | 9/10      | MPa               |
| Tensile Stress at Break      | MD/TD**      | ISO 1184     | 65/60     | MPa               |
| Elongation at Break          | MD/TD**      | ISO 1184     | 550/670   | %                 |
| 1% Secant modulus            | MD/TD**      | ISO 1184     | 180/200   | MPa               |
| Elmendorf tear strength      | MD/TD**      | ASTM D 1922  | 200/440   | g/25 µm           |
| Coefficient of friction      |              | ASTM D1894   | < 0.25    |                   |
| <b>Optical</b>               |              |              |           |                   |
| Haze                         |              | ASTM D 1003  | 8         | %                 |
| Gloss                        | 45°          | ASTM D 2457  | 62        | %                 |
| <b>Thermal</b>               |              |              |           |                   |
| Peak DSC melting temperature | 2nd heating  | ASTM D 3418  | 105 - 118 | °C                |
| <b>Additives</b>             |              |              |           |                   |
| Antioxidants and PPA         |              |              |           |                   |
| Slip (erucamide)             |              | INEOS method | 1000      | ppm               |
| Antiblock (silica)           |              | INEOS method | 300       | ppm               |

**Data should not be used for specification work**

\* 25 µm film 2.5:1 blow-up ratio, 200°C melt temperature - \*\* MD = machine direction, TD = transverse direction

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## Processing guidelines

**Eltex<sup>®</sup> PF6212KE** in lean blends can be processed on most standard extrusion equipment. Optimisation of conditions may be necessary, depending on the exact blend used.

**Eltex<sup>®</sup> PF6212KE** rich film formulations are often processed on modified LDPE machinery, but for the best performance the use of purposely designed LLDPE machinery is recommended. Particular attention should be paid to maintaining a low melt temperature, and an efficient bubble cooling system should be employed. The recommended melt temperature range is 190 - 230°C.

## Storage

The product should be stored in a dry and dust free environment at temperature below 50°C. Exposure to direct sunlight should be avoided as this may lead to product deterioration. It is advised to process the product within maximum one year after delivery.

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### Regulatory Information

The product and uses described herein may be subject to specific requirements or limitations for use in certain applications like food contact, drinking water or medical devices. Further information may be obtained from the website [www.ineos.com](http://www.ineos.com) where a specific Regulatory Certificate is available for each grade under the heading "SDS & Regulatory Certificate".

Unless specifically indicated, the product mentioned herein is not suitable for applications in the medical or pharmaceutical sectors.

### Health and Safety Information

The product described herein may require precautions in handling. The available product health and safety information for this material is contained in the Safety Data Sheet (SDS) that may be obtained from the website [www.ineos.com](http://www.ineos.com). Before using any material, a customer is advised to consult the SDS for the product under consideration for use.

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