

# rLDPE Blue

Sustainable low-density polyethylene resin

## Product description

Low density polyethylene resin reprocessed from post-consumer & post-industrial films. The material is shredded and washed through a wash plant before it is processed through degassing and very fine filtration to produce high purity reprocessed resin.

r-LDPE Blue is a blown film grade and exhibits excellent processability and good balance of toughness, strength and stretch properties. This grade is also suitable for profile and sheet extrusion.

## Colour

Blue



## Packaging

1000kg bulk bag

| Properties <sup>1</sup>                    | Typical values | Variance | Units                   | Test methods         |
|--|----------------|----------|-------------------------|----------------------|
| <b>Polymer properties</b>                  |                |          |                         |                      |
| Melt flow rate (190C / 2.16kg)             | 1.6            | ± 0.5    | g 10 mins <sup>-1</sup> | EN ISO 1133          |
| Density                                    | 0.92           | ± 0.015  | g cm <sup>-3</sup>      | EN ISO 1183-1        |
| Filtration                                 | 110-130        |          | µm                      |                      |
| Moisture content                           | < 1            |          | weight %                | weight loss at 105°C |
| <b>Typical film properties<sup>2</sup></b> |                |          |                         |                      |
| Dart impact strength                       | 70             | ± 10     | G                       | BS EN ISO 7765-1     |
| Tear strength TD Elmendorf                 | 3550           | ± 50     | mN                      | BS EN ISO 6383-2     |
| Tear strength MD Elmendorf                 | 1500           | ± 50     | mN                      |                      |
| Tensile strength TD                        | 14             | ± 3      | MPa                     | BS EN ISO 527        |
| Tensile strength MD                        | 18             | ± 3      | MPa                     |                      |
| Tensile elongation at break TD             | 500            | ± 50     | %                       |                      |
| Tensile elongation at break MD             | 300            | ± 50     | %                       |                      |

<sup>1</sup>Please note that the property details shown in the above table are typical for the material type and obtained by averaging lab data from several samples taken during production. Users should confirm results by their own testing.

<sup>2</sup>Measured on blown film of 25 µm and BUR of 2.5 at external testing facility.

### **Processing**

rLDPE Blue is typically extruded at a melt temperature around 190°C (min 180°C, max 240°C).