## **TECHNICAL DATA SHEET**

## Cyclix XHD-HW-WT/OT

Circular HDPE from Household Waste - Odor Treated

Healix helps breaking the plastic wave by closing the loop on plastic fiber waste.

Cyclix is our brand name for non-fibrous post-consumer waste processed at Healix, such as household packaging or commercial and industrial waste.





## **Product Characteristics**

Cyclix XHD-HW-WT/OT is a light colorsorted high-density polyethylene (HDPE) grade supplied in pellet form. This 100% Post-Consumer Waste based grade, originating from recycled household packaging waste flakes of Umincorp, is characterized by a high molecular weight with easy colorability and good processing properties. The material has a very low odor.

## **Recommended Applications**

Cyclix XHD-HW-WT/OT is a generalpurposegrade that can be used for bottles and containers < 5L in e.g. personal care, household and industrial liquids, and for extruded articles such as pipes, profiles, wire & cable jacketing.

This product is not tested and therefore not validated for use in food, pharmaceutical, medical, or potable water applications.

| Physical                       |          |               |                    |
|--------------------------------|----------|---------------|--------------------|
| Description                    | Unity    | Typical value | Standard           |
| Meltflow Index (190°C/2.16 kg) | g/10 min | 0.5           | ISO 1133-1         |
| Density                        | kg/m³    | 958           | ISO 1183-1         |
| Bulk Density                   | kg/m³    | 570           | ISO 60             |
| Ash content                    | %        | < 1.5         | ISO 3451-1/A/600°C |
| Volatiles                      | %        | < 0.1         | ASTM D6980 @ 120°C |
| PE Content (DSC)               | %        | > 95          | ISO 11357-3        |
| Mechanical <sup>1</sup>        |          |               |                    |

| Mechanical                    |       |               |               |
|-------------------------------|-------|---------------|---------------|
| Description                   | Unity | Typical value | Standard      |
| Tensile Modulus               | MPa   | 950           | ISO 527-2/1A  |
| Strain at yield               | %     | 10            | ISO 527-2/1A  |
| Strain at break               | %     | 60            | ISO 527-2/1A  |
| Stress at yield               | MPa   | 24            | ISO 527-2/1A  |
| Flexural Modulus              | MPa   | 1.000         | ISO 178       |
| Charpy Impact (notched, 23°C) | kJ/m² | 15            | ISO 179-1/1eA |

<sup>&</sup>lt;sup>1</sup> Properties were determined on injection moulded specimens prepared in accordance with ISO 1873-2

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