

# SIBUR

## Technical Data Sheet PE HD10500 FE High-Density Polyethylene

### PRODUCT DESCRIPTION

PE HD10500 FE is a high molecular weight, high-density hexene copolymer with a broad molecular weight distribution. The product provides a good balance of easy processability and bubble stability with beneficial physical and mechanical properties. Films produced from this resin perform excellent stiffness and tensile strength.

### TYPICAL APPLICATIONS

PE HD10500 FE is recommended for the production of general purpose thin films with high tensile strength and toughness, carrier bags, grocery sacks and liners. It is also used in multilayer flexible structures.

| Properties                                 | Conditions     | Method     | Typical values* | Units             |
|--|----------------|------------|-----------------|-------------------|
| <b>Resin properties</b>                    |                |            |                 |                   |
| Melt Flow Rate                             | 190 °C/21.6 kg | ISO 1133-1 | 10              | g/10 min          |
| Density                                    |                | ISO 1183   | 0.950           | g/cm <sup>3</sup> |
| <b>Properties measured on 15 µm film**</b> |                |            |                 |                   |
| Tensile Strength at Break                  | MD/TD          | ISO 527-1  | 65/57           | MPa               |
| Tensile Stress at Yield                    | MD/TD          | ISO 527-1  | 32/29           | MPa               |
| Elongation at Break                        | MD/TD          | ISO 527-1  | 400/450         | %                 |
| Dart Drop Impact Strength                  |                | ASTM D1709 | 150             | g                 |
| Tear Strength                              | 23 °C          | ASTM D1922 | 8               | g/25 µm           |

\*The values given are typical values measured on the product. These values should not be considered as specification.

\*\*Properties are measured on 15 µm gauge films with a blow up ratio of 5 and a neck height of 8D.


### REACH Statement

Polymers are exempt of REACH registration. However, their raw materials which mean monomers and relevant additives have been registered.

**PJSC «Sibur Holding» (and its subsidiaries)** is committed to fully respect REACH legislation and to use only REACH compliant raw materials.

### Safety

See MSDS



**The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications. To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information. PJSC «Sibur Holding» (and its subsidiaries) makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.**

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