

# SABIC® LLDPE 221WT

LINEAR LOW DENSITY POLYETHYLENE  
REGION ASIA

## DESCRIPTION

SABIC® 221WT is an ethylene-butene copolymer designed for blown film application. 221WT has Superior film mechanical property like stiffness, puncture resistance and tensile strength, it also has excellent sealing property. 221WT contains high slip and high antiblock.

## TYPICAL APPLICATIONS

Cloth bag, carrier bag, thin layer coating, refuse bag, meat packaging and other food packaging or lamination film ,general purpose consumer packaging etc.

## TYPICAL PROPERTY VALUES

Revision 20230602

| PROPERTIES                   | TYPICAL VALUES | UNITS             | TEST METHODS |
|------------------------------|----------------|-------------------|--------------|
| <b>POLYMER PROPERTIES</b>    |                |                   |              |
| <b>Melt Flow Rate (MFR)</b>  |                |                   |              |
| at 190°C and 2.16 kg         | 1.9            | g/10 min          | ASTM D1238   |
| <b>Density at 23°C</b>       | 921            | kg/m <sup>3</sup> | ASTM D1505   |
| <b>FORMULATION</b>           |                |                   |              |
| <b>Slip agent</b>            | ☑              | -                 | -            |
| <b>Anti block agent</b>      | ☑              | -                 | -            |
| <b>MECHANICAL PROPERTIES</b> |                |                   |              |
| <b>Tensile test</b>          |                |                   |              |
| stress at yield, MD          | 10             | MPa               | ASTM D882    |
| stress at yield, TD          | 10             | MPa               | ASTM D882    |
| stress at break, MD          | 31             | MPa               | ASTM D882    |
| stress at break, TD          | 23             | MPa               | ASTM D882    |
| elongation at break, MD      | 450            | %                 | ASTM D882    |
| elongation at break, TD      | 600            | %                 | ASTM D882    |
| <b>OPTICAL PROPERTIES</b>    |                |                   |              |
| <b>Gloss</b>                 |                |                   |              |
| at 45°                       | 50             | -                 | ASTM D2457   |
| <b>Haze <sup>(1)</sup></b>   | 16             | %                 | ASTM D1003   |
| <b>FILM PROPERTIES</b>       |                |                   |              |
| <b>Dart Impact F50</b>       | 112            | g                 | ASTM D1709   |

(1) Properties have been measured by producing 30 µ film with 2 BUR using 100% 221WT.

## PROCESSING CONDITIONS

Typical processing conditions for 221WT are:

Barrel temperature: 190 - 220°C

Blow up ratio: 2.0 - 3.0



## FOOD REGULATION

Please contact the local sales / Technical representative for details.

## STORAGE AND HANDLING

Polyethylene resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

## DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.