

## 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 |
|----------------------------------------|----------------|----------|--------------|
| <strong>POLYMER PROPERTIES</strong>    |                |          |              |
| <strong>Melt Flow Rate (MFR)</strong>  |                |          |              |
| at 190°C and 2.16 kg                   | 1.9            | g/10 min | ASTM D1238   |
| <strong>Density at 23°C</strong>       | 921            | kg/m³    | ASTM D1505   |
| <strong>FORMULATION</strong>           |                |          |              |
| <strong>Slip agent</strong>            | ☑              | -        | -            |
| <strong>Anti block agent</strong>      | ☑              | -        | -            |
| <strong>MECHANICAL PROPERTIES</strong> |                |          |              |
| <strong>Tensile test</strong>          |                |          |              |
| 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    |
| <strong>OPTICAL PROPERTIES</strong>    |                |          |              |
| <strong>Gloss</strong>                 |                |          |              |
| at 45°                                 | 50             | -        | ASTM D2457   |
| <strong>Haze <sup>(1)</sup></strong>   | 16             | %        | ASTM D1003   |
| <strong>FILM PROPERTIES</strong>       |                |          |              |
| <strong>Dart Impact F50</strong>       | 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

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CHEMISTRY THAT MATTERS™



### 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.

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