

# SABIC® 920NT

SABIC® 920NT is an ethylene-butene copolymer designed for blown film application. Excellent mechanical strength, tear and puncture resistance. 920NT contains no slip and no antiblock.  
Information provided by SABIC

| Physical Properties | Metric     | English                   | Comments   |
|---------------------|------------|---------------------------|------------|
| Density             | 0.920 g/cc | 0.0332 lb/in <sup>3</sup> | ASTM D1505 |

|           |                                                       |                                                       |            |
|-----------|-------------------------------------------------------|-------------------------------------------------------|------------|
| Melt Flow | 0.85 g/10 min<br>@Load 2.16 kg,<br>Temperature 190 °C | 0.85 g/10 min<br>@Load 4.76 lb,<br>Temperature 374 °F | ASTM D1238 |
|-----------|-------------------------------------------------------|-------------------------------------------------------|------------|

| Mechanical Properties              | Metric   | English  | Comments  |
|------------------------------------|----------|----------|-----------|
| Film Tensile Strength at Yield, MD | 10.0 MPa | 1450 psi | ASTM D882 |

|                                    |          |          |           |
|------------------------------------|----------|----------|-----------|
| Film Tensile Strength at Yield, TD | 10.0 MPa | 1450 psi | ASTM D882 |
|------------------------------------|----------|----------|-----------|

|                              |       |       |           |
|------------------------------|-------|-------|-----------|
| Film Elongation at Break, MD | 550 % | 550 % | ASTM D882 |
|------------------------------|-------|-------|-----------|

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|------------------------------|-------|-------|-----------|
| Film Elongation at Break, TD | 700 % | 700 % | ASTM D882 |
|------------------------------|-------|-------|-----------|

|                 |        |            |                   |
|-----------------|--------|------------|-------------------|
| Puncture Energy | 75.0 J | 55.3 ft-lb | J/m; SABIC method |
|-----------------|--------|------------|-------------------|

|                            |      |      |            |
|----------------------------|------|------|------------|
| Elmendorf Tear Strength MD | 35 g | 35 g | ASTM D1922 |
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|                            |       |       |            |
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| Elmendorf Tear Strength TD | 135 g | 135 g | ASTM D1922 |
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|                |       |          |                 |
|----------------|-------|----------|-----------------|
| Dart Drop Test | 118 g | 0.260 lb | F50; ASTM D1709 |
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|------------------------------------|----------|----------|-----------|
| Film Tensile Strength at Break, MD | 34.0 MPa | 4930 psi | ASTM D882 |
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| Film Tensile Strength at Break, TD | 26.0 MPa | 3770 psi | ASTM D882 |
|------------------------------------|----------|----------|-----------|

| Optical Properties | Metric                       | English                       | Comments                              |
|--------------------|------------------------------|-------------------------------|---------------------------------------|
| Haze               | 12 %<br>@Thickness 0.0300 mm | 12 %<br>@Thickness 0.00118 in | 2.5 BUR using 100% 920NT.; ASTM D1003 |

|       |      |      |                 |
|-------|------|------|-----------------|
| Gloss | 60 % | 60 % | 45°; ASTM D2457 |
|-------|------|------|-----------------|