

Product Texts

LNP COLORCOMP A1000HC compound is based on unfilled Acrylonitrile Butadiene Styrene (ABS) resin. Added features of this grade include: Healthcare

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|------------------------|---------------|
| ISO Data | | | |
| Melt volume-flow rate, MVR | 14 | cm ³ /10min | ISO 1133 |
| Temperature | 220 | °C | - |
| Load | 5 | kg | - |
| Melt flow index, MFI | 19 | g/10min | ISO 1133 |
| Temperature | 220 | °C | - |
| Load | 10 | kg | - |
| ASTM Data | | | |
| Melt Flow Index, MFI | 5.6 | g/10min | ASTM D 1238 |
| Temperature | 230 | °C | - |
| Load | 3.8 | kg | - |

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 2530 | MPa | ISO 527 |
| Yield stress | 50 | MPa | ISO 527 |
| Yield strain | 2.6 | % | ISO 527 |
| Stress at break | 35 | MPa | ISO 527 |
| Strain at break | 24.8 | % | ISO 527 |
| Flexural modulus | 2410 | MPa | ISO 178 |
| Charpy notched impact strength, +23°C | 18 | kJ/m ² | ISO 179/1eA |
| Izod notched impact strength, +23°C, 4mm | 23 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength, -30°C, 4mm | 8 | kJ/m ² | ISO 180/1A |
| ASTM Data | | | |
| Tensile Modulus | 2270 | MPa | ASTM D 638 |
| Tensile Strength at Yield | 44 | MPa | ASTM D 638 |
| Tensile Strength at Break | 33 | MPa | ASTM D 638 |
| Elongation at Yield | 2 | % | ASTM D 638 |
| Elongation at Break | 24 | % | ASTM D 638 |
| Flexural Modulus | 2340 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 320 | J/m | ASTM D 256 |
| Izod Impact notched, Low-Temperature | 133 | J/m | ASTM D 256 |
| Temperature | -30 | °C | - |

| Thermal properties | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 80 | °C | ISO 75-1/-2 |
| Vicat softening temperature, B | 100 | °C | ISO 306 |
| Vicat softening temperature, 120°C/h 50N | 100 | °C | ISO 306 |
| ASTM Data | | | |
| DTUL @ 66 psi | 94 | °C | ASTM D 648 |
| DTUL @ 264 psi | 80 | °C | ASTM D 648 |
| Vicat Temperature | 98 | °C | ASTM D 1525 |

| Other properties | Value | Unit | Test Standard |
|---------------------|-------|-------------------|----------------|
| Water absorption | 1 | % | Sim. to ISO 62 |
| Humidity absorption | 0.2 | % | Sim. to ISO 62 |
| Density | 1050 | kg/m ³ | ISO 1183 |
| Density | 1050 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---------|------|---------------|
| Pre-drying - Temperature | 80 - 95 | °C | - |
| Pre-drying - Time | 2 - 4 | h | - |
| Processing humidity | ≤0.1 | % | - |

LNP™ COLORCOMP™ Compound A1000HC

ABS

Saudi Basic Industries Corporation (SABIC)

| | | | |
|------------------|------------------|-----|---|
| Melt temperature | 220 - 260 | °C | - |
| Mold temperature | 50 - 70 | °C | - |
| Zone 1 | 190 - 210 | °C | - |
| Zone 2 | 205 - 225 | °C | - |
| Zone 3 | 215 - 240 | °C | - |
| Screw speed | 30 - 60 | rpm | - |
| Back pressure | 0.3 - 0.7 | MPa | - |

Characteristics**Processing**

Injection Molding

Regional Availability

North America, Europe, Asia Pacific