

Product Texts

LNP THERMOCOMP COMPOUND DC0041 is a compound based on Polycarbonate resin containing Carbon Fiber. Added feature of this grade is: Flame Retardant.

UL Yellow Card [E207780-104549810](https://www.ul.com/yellow-card/E207780-104549810)

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|--------|-------|---------------|
| ASTM Data | | | |
| Mold Shrinkage, MD | 0.0005 | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | 0.0017 | mm/mm | ASTM D 955 |

| Mechanical properties | Value | Unit | Test Standard |
|---------------------------------------|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 16800 | MPa | ISO 527 |
| Stress at break | 153 | MPa | ISO 527 |
| Strain at break | 1.8 | % | ISO 527 |
| Flexural modulus, 23°C | 13700 | MPa | ISO 178 |
| Flexural strength | 185 | MPa | ISO 178 |
| Charpy impact strength, +23°C | 24 | kJ/m ² | ISO 179/1eU |
| Charpy impact strength, -30°C | 28 | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, +23°C | 5 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 5 | kJ/m ² | ISO 179/1eA |
| Izod impact strength, +23°C | 21 | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C | 6 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength | 5 | kJ/m ² | ISO 180/1A |
| Temperature | -30 | °C | - |
| ASTM Data | | | |
| Tensile Modulus | 16200 | MPa | ASTM D 638 |
| Tensile Strength at Break | 148 | MPa | ASTM D 638 |
| Elongation at Break | 1.9 | % | ASTM D 638 |
| Flexural Modulus | 14600 | MPa | ASTM D 790 |
| Flexural Strength | 190 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 50 | J/m | ASTM D 256 |
| Izod Impact notched, Low-Temperature | 44 | J/m | ASTM D 256 |
| Temperature | -30 | °C | - |
| Izod Impact unnotched, 1/8 in | 358 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|---|-------|-------|-----------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 98 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 104 | °C | ISO 75-1/-2 |
| Vicat softening temperature, B | 106 | °C | ISO 306 |
| Coeff. of linear therm. expansion, parallel | 75 | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal | 79 | E-6/K | ISO 11359-1/-2 |
| Burning behav. at thickness h | V-1 | class | IEC 60695-11-10 |
| Thickness tested | 0.7 | mm | - |
| Yellow Card available | yes | - | - |
| ASTM Data | | | |
| UL 94 Flame rating | V-0 | - | UL 94 |
| Thickness tested | 0.8 | mm | - |
| Coefficient of Thermal Expansion, MD | 66 | E-6/K | ASTM D 696 |
| Coefficient of Thermal Expansion, TD | 77 | E-6/K | ASTM D 696 |
| DTUL @ 66 psi | 103 | °C | ASTM D 648 |
| DTUL @ 264 psi | 98 | °C | ASTM D 648 |

| Electrical properties | Value | Unit | Test Standard |
|-----------------------|-------|------|---------------|
| ASTM Data | | | |

LNP™ THERMOCOMP™ Compound DC0041

PC-CF

Saudi Basic Industries Corporation (SABIC)

| | | | |
|---------------------|-------------|--------|------------|
| Surface Resistivity | 1E8 | Ohm | ASTM D 257 |
| Volume Resistivity | 1E10 | Ohm*cm | ASTM D 257 |

| Other properties | Value | Unit | Test Standard |
|------------------|-------------|-------------------|---------------|
| Density | 1300 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|------------------|------|---------------|
| Pre-drying - Temperature | 70 | °C | - |
| Pre-drying - Time | 4 | h | - |
| Processing humidity | ≤0.02 | % | - |
| Melt temperature | 275 - 330 | °C | - |
| Mold temperature | 60 - 85 | °C | - |
| Zone 1 | 260 - 300 | °C | - |
| Zone 2 | 270 - 310 | °C | - |
| Zone 3 | 280 - 320 | °C | - |
| Screw speed | 30 - 63 | rpm | - |
| Back pressure | 0.2 - 0.3 | MPa | - |

Characteristics**Processing**

Injection Molding

Special Characteristics

Flame retardant, Halogen-free

Features

Ductile

Applications

IT / Business Machine, Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America