# LUPOY® EU5000W

## LG Chem Ltd. - Polycarbonate + ASA

Wednesday, January 28, 2026

## General Information

**Product Description**

UV Resistant, Good Flow

Application
Auto / Exterior / Roof Rack

Material Type
PC/ASA

| General | | |
|---|---|---|
| Material Status | • Commercial: Active | |
| Availability | • Asia Pacific<br>• Europe | • Latin America<br>• North America |
| Features | • Good Flow | • Good Weather Resistance |
| Uses | • Automotive Applications | • Automotive Exterior Parts |
| Processing Method | • Injection Molding | |
| Multi-Point Data | • Isothermal Stress vs. Strain (ISO 11403) | • Tensile Stress vs. Strain (ASTM D638) |

## Properties

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density / Specific Gravity | | | |
| -- [1] | 1.13 | g/cm³ | ASTM D792 |
| 23°C | 1.13 | g/cm³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) | | | |
| 250°C/2.16 kg | 8.6 | g/10 min | ASTM D1238 |
| 260°C/5.0 kg | 44 | g/10 min | ISO 1133 |
| Molding Shrinkage | | | ASTM D955<br>ISO 294-4 |
| Flow : 2.00 mm | 0.60 to 0.80 | % | |
| Across Flow : 2.00 mm | 0.60 to 0.80 | % | |
| Water Absorption (Equilibrium, 23°C, 50% RH) | 0.20 | % | ASTM D570<br>ISO 62 |

| Mechanical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Tensile Modulus | | | |
| 3.20 mm [2] | 1950 | MPa | ASTM D638 |
| 4.00 mm | 1900 | MPa | ISO 527-1/1 |
| Tensile Strength | | | |
| Yield, 3.20 mm [2] | 53.0 | MPa | ASTM D638 |
| Yield, 4.00 mm | 51.0 | MPa | ISO 527-2/50 |
| Break, 3.20 mm [2] | 48.1 | MPa | ASTM D638 |
| Break, 4.00 mm | 45.0 | MPa | ISO 527-2/50 |

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| Mechanical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Tensile Elongation | | | |
| Yield, 3.20 mm [2] | 5.0 | % | ASTM D638 |
| Yield, 4.00 mm | 5.0 | % | ISO 527-2/50 |
| Break, 3.20 mm [2] | 120 | % | ASTM D638 |
| Break, 4.00 mm | 120 | % | ISO 527-2/50 |
| Flexural Modulus | | | |
| 3.20 mm [3] | 2010 | MPa | ASTM D790 |
| 4.00 mm [4] | 2030 | MPa | ISO 178 |
| Flexural Strength | | | |
| 3.20 mm [3] | 85.8 | MPa | ASTM D790 |
| 4.00 mm [4] | 76.0 | MPa | ISO 178 |

| Impact | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Charpy Notched Impact Strength | | | ISO 179 |
| -40°C, 4.00 mm | 11 | kJ/m² | |
| -30°C, 4.00 mm | 17 | kJ/m² | |
| 23°C, 4.00 mm | 44 | kJ/m² | |
| Notched Izod Impact | | | |
| -40°C, 6.40 mm | 110 | J/m | ASTM D256 |
| -30°C, 3.20 mm | 130 | J/m | ASTM D256 |
| -30°C, 6.40 mm | 120 | J/m | ASTM D256 |
| 23°C, 3.20 mm | 470 | J/m | ASTM D256 |
| 23°C, 6.40 mm | 230 | J/m | ASTM D256 |
| -40°C, 4.00 mm | 11 | kJ/m² | ISO 180 |
| -30°C, 4.00 mm | 13 | kJ/m² | ISO 180 |
| 23°C, 4.00 mm | 43 | kJ/m² | ISO 180 |

| Hardness | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Rockwell Hardness (R-Scale) | 115 | | ASTM D785<br>ISO 2039-2 |

| Thermal | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Deflection Temperature Under Load | | | |
| 0.45 MPa, Unannealed, 6.40 mm [5] | 122 | °C | ASTM D648 |
| 0.45 MPa, Unannealed, 4.00 mm | 117 | °C | ISO 75-2/Bf |
| 1.8 MPa, Unannealed, 6.40 mm [6] | 103 | °C | ASTM D648 |
| 1.8 MPa, Unannealed, 4.00 mm | 97.0 | °C | ISO 75-2/Af |
| Vicat Softening Temperature [7] | 116 | °C | ISO 306/B50<br>ASTM D1525 [8] |
| CLTE | | | |
| Flow : -30 to 80°C | 8.9E-5 | cm/cm/°C | ASTM D696 |
| Flow : -30 to 80°C | 89 | ppm/K | ISO 11359-2 |
| Transverse : -30 to 80°C | 9.2E-5 | cm/cm/°C | ASTM D696 |
| Transverse : -30 to 80°C | 92 | ppm/K | ISO 11359-2 |

| Electrical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Surface Resistivity (23°C) | 1.0E+15 | ohms | ASTM D257 |
| Volume Resistivity (23°C) | 1.0E+15 | ohms·cm | ASTM D257 |
| Dielectric Strength (23°C, 2000 µm) | 19 | kV/mm | ASTM D149 |
| Dielectric Constant (23°C) | 2.80 | | ASTM D150 |

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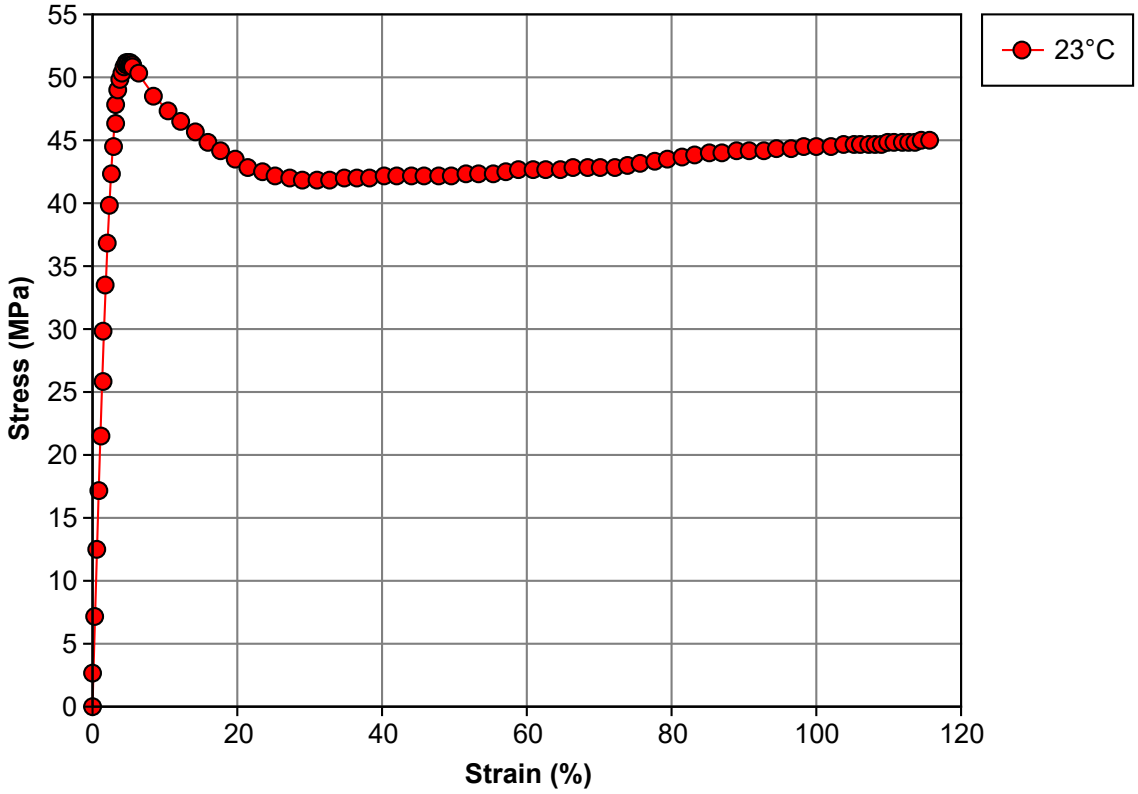
**Isothermal Stress vs. Strain (ISO 11403)**



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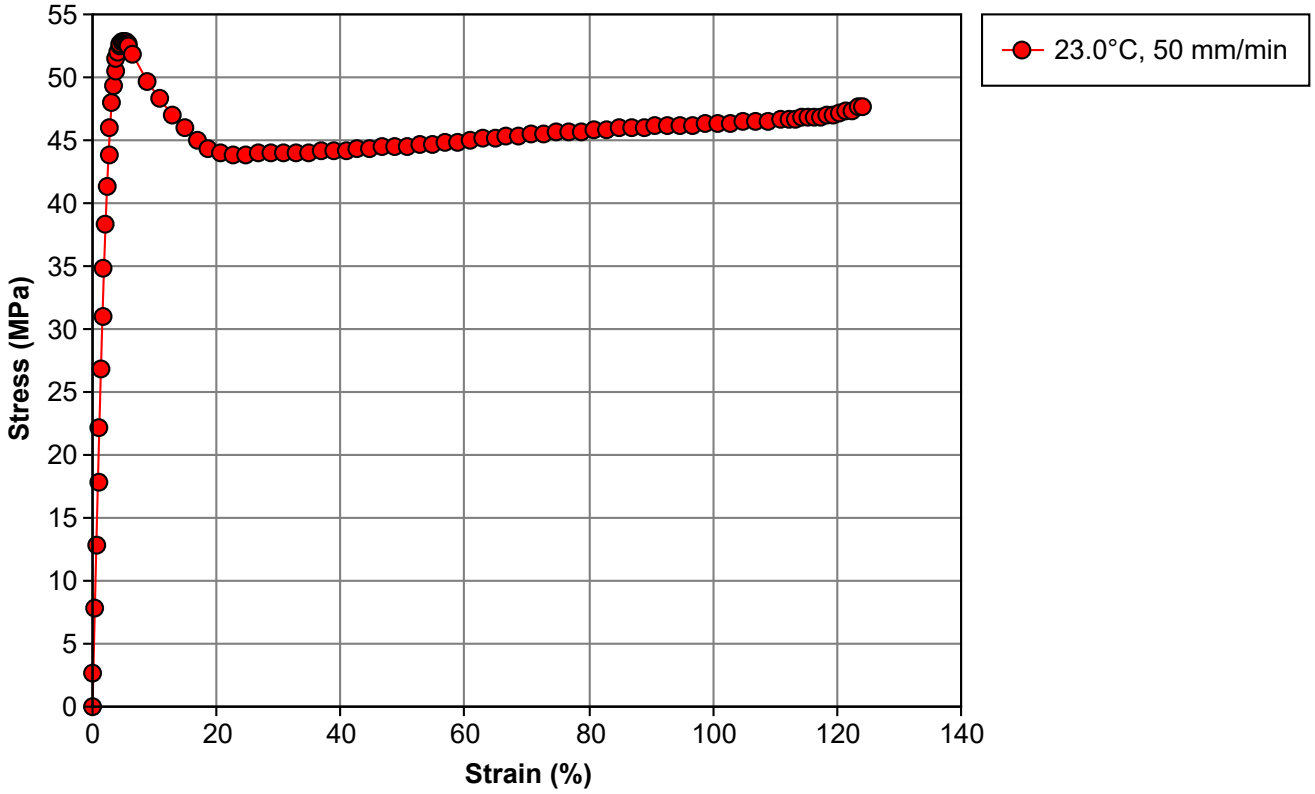
## LG Chem Ltd. - Polycarbonate + ASA

**Tensile Stress vs. Strain (ASTM D638)**



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### Processing Information

| Injection | Nominal Value | Unit |
|---|---|---|
| Drying Temperature | 80 to 100 | °C |
| Drying Time | 4.0 to 6.0 | hr |
| Suggested Max Moisture | 0.020 | % |
| Rear Temperature | 240 to 270 | °C |
| Middle Temperature | 245 to 275 | °C |
| Front Temperature | 245 to 275 | °C |
| Nozzle Temperature | 245 to 275 | °C |
| Processing (Melt) Temp | 250 to 275 | °C |
| Mold Temperature | 50 to 70 | °C |
| Back Pressure | 0.490 to 1.47 | MPa |
| Screw Speed | 40 to 70 | rpm |

### Notes

[1] 23°C

[2] 50 mm/min

[3] 10 mm/min

[4] 2.0 mm/min

[5] 4.6kgf

[6] 18.6kgf

[7] 5kg

[8] Rate A (50°C/h)