

## LG Chemical LUCEL EC-610B Electrically Conductive POM, 10% Carbon Black Filled

Category : Polymer , Thermoplastic , Acetal (POM)

### Material Notes:

LUCEL semi-crystalline acetal copolymer resins are produced by gas phase polymerization. LUCEL resins can be widely accepted as the replacement of thermosets, aluminum and zinc die-casts or other metals. Characteristics: No pungent smell in processing Excellent thermal stability based on structure of Acetal Copolymer Well balanced mechanical properties and resistance to creep Highest fatigue resistance to organic and chemical and hot water Excellent friction and abrasion resistance High dimensional stability and good moldability Easy part design and application over a broad range of environmental conditions Applications: Automotive: Water valve parts, radiator drain cock, carburetor float, exhaust gas valve, diaphragm valve, door lock, winker switch, wiper gear and pivot bearing, speedometer gear, window glass bottom channel, safety belt, retractor parts, door handle, lumbar support handle, sun visor bracket, collapsible room mirror stay, fender mirror body, waster pump nozzle Electrical and Electronic: Switch, coil bobbin, micrometer base, tuner parts, control switch parts, dial mechanism, cassette tape reel, power transmission gear, shaft nearing, bracket, fan motor housing, spring frame of headphone, arc shooter, toner agitating rotor, printer mechanism, gas meter component Industrial Parts and Others: Spring, bearing, spray guns, power cylinder, watch gear, alarm clock base, hot water pot housing, gear housing, table top chain runner, zipper, partition corner piece curtain runner, blind gear, door runner, office furniture parts, accessories, comb, pressure container Information Provided by LG Chem

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_LG-Chemical-LUCEL-EC-610B-Electrically-Conductive-POM-10-Carbon-Black-Filled.php](http://www.lookpolymers.com/polymer_LG-Chemical-LUCEL-EC-610B-Electrically-Conductive-POM-10-Carbon-Black-Filled.php)

| Physical Properties   | Metric              | English             | Comments  |
|-----------------------|---------------------|---------------------|-----------|
| Specific Gravity      | 1.43 g/cc           | 1.43 g/cc           | ASTM D792 |
| Linear Mold Shrinkage | 0.016 - 0.019 cm/cm | 0.016 - 0.019 in/in | ASTM D955 |

| Mechanical Properties     | Metric     | English        | Comments                   |
|---------------------------|------------|----------------|----------------------------|
| Hardness, Rockwell M      | 82         | 82             | ASTM D785                  |
| Tensile Strength at Break | 54.0 MPa   | 7830 psi       | ASTM D638                  |
| Elongation at Break       | 5.0 %      | 5.0 %          | ASTM D638                  |
| Flexural Strength         | 98.0 MPa   | 14200 psi      | ASTM D790                  |
| Flexural Modulus          | 2.80 GPa   | 406 ksi        | ASTM D790                  |
| Izod Impact, Notched      | 0.300 J/cm | 0.562 ft-lb/in | ASTM D256                  |
|                           | 2.60 J/cm  | 4.87 ft-lb/in  | Reverse notched; ASTM D256 |

| Thermal Properties                          | Metric  | English | Comments  |
|---|---------|---------|-----------|
| Deflection Temperature at 0.46 MPa (66 psi) | 160 Â°C | 320 Â°F | ASTM D648 |

| Deflection Temperature at 1.8 MPa<br>(100 psi)<br>Thermal Properties | Metric<br>120 Å°C | English<br>248 Å°F | Comments<br>ASTM D2448 |
|--|-------------------|--------------------|------------------------|
| <b>Processing Properties</b>   | <b>Metric</b>     | <b>English</b>     | <b>Comments</b>        |
| Rear Barrel Temperature  | 170 - 190 Å°C     | 338 - 374 Å°F      |                        |
| Middle Barrel Temperature  | 190 - 210 Å°C     | 374 - 410 Å°F      |                        |
| Front Barrel Temperature   | 200 - 220 Å°C     | 392 - 428 Å°F      |                        |
| Nozzle Temperature   | 200 - 220 Å°C     | 392 - 428 Å°F      |                        |
| Melt Temperature   | 210 - 220 Å°C     | 410 - 428 Å°F      |                        |
| Mold Temperature   | 60.0 - 120 Å°C    | 140 - 248 Å°F      |                        |
| Drying Temperature   | 90.0 - 110 Å°C    | 194 - 230 Å°F      |                        |
| Dry Time   | 3 - 6 hour        | 3 - 6 hour         |                        |
| Injection Pressure   | 39.23 - 83.36 MPa | 5690 - 12090 psi   | Second                 |
|  | 68.7 - 118 MPa    | 9960 - 17100 psi   | First                  |
| Back Pressure  | 0.000 - 3.92 MPa  | 0.000 - 569 psi    |                        |
| Screw Speed  | 40 - 75 rpm       | 40 - 75 rpm        |                        |

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China