

# KOPEL<sup>®</sup> KP3339UMHR

Injection Molding/Extrusion, PEL, General Purpose, Modest Modulus

## Application

Living(House roofing, Cable)

| Properties                        | Measurement condition       | Test Method | Unit    | Typical value |
|-----------------------------------|-----------------------------|-------------|---------|---------------|
| <b>Physical</b>                   |                             |             |         |               |
| Density                           |                             | ASTM D792   | -       | 1.11          |
| Melt Flow Index                   | 230 ℃, 2.16kg               | ASTM D1238  | g/10min | 11.5          |
| Shrinkage                         |                             | ASTM D955   | %       | 1.10~1.14     |
| Water Absorption                  | 23℃, H <sub>2</sub> O, 24hr | ASTM D570   | %       | 0.7           |
| <b>Mechanical</b>                 |                             |             |         |               |
| Tensile Strength at Break (3.2mm) | 200 mm/min                  | ASTM D638   | MPa     | 25            |
| Elongation at Break (3.2mm)       | 200 mm/min                  | ASTM D638   | %       | 860           |
| Flexural Strength (3.2mm)         | 200 mm/min                  | ASTM D790   | MPa     | 4             |
| Flexural Modulus (3.2mm)          | 200 mm/min                  | ASTM D790   | MPa     | 49            |
| Izod Impact Strength (6.4mm)      |                             | ASTM D256   |         |               |
| (Notched)                         | 23 ℃                        |             | J/m     | NB            |
|                                   | -30 ℃                       |             | J/m     | NB            |
| Shore hardness                    | D scale                     | ASTM D2240  | -       | 39            |
| <b>Thermal</b>                    |                             |             |         |               |
| Melting Point                     | 20 ℃/min                    | ASTM D3418  | ℃       | 195           |
| Vicat softening temperature       | 10N                         | ASTM D1525  | ℃       | 138           |
| Flammability(0.8mm)               |                             | UL94        | Class   | HB            |
| <b>Electrical</b>                 |                             |             |         |               |
| Dielectric Strength               |                             | IEC 60243   | kV/mm   |               |
| Volume Resistivity                |                             | IEC 60093   | Ω·cm    |               |
| Surface Resistivity               |                             | IEC 60093   | Ω/sq    |               |

※ 1Mpa = 10.197162 Kg/cm<sup>2</sup>, 1J/m = 0.10197 Kg·cm/cm, ( Test specimen Thickness )



## Processing Guide (Injection Molding)

|                                 |         |                       |         |         |
|---------------------------------|---------|-----------------------|---------|---------|
| Drying Temperature(℃)           | 100~110 | (Dehumidifying Dryer) |         |         |
| Drying Time(hr)                 | 3~8     |                       |         |         |
| Processing Moisture Contents(%) | ≤ 0.1   |                       |         |         |
| Cylinder Temperature(℃)         | Nozzle  | Front                 | Middle  | Rear    |
|                                 | 210~220 | 210~220               | 200~220 | 180~190 |
| Mold Temperature(℃)             | 20~40   |                       |         |         |

