

# KOPA® KN333G15

Injection Molding , PA66+GF15%, General Purpose

## Application

Automotive(Valve Covers)

| Properties                        | Measurement condition       | Test Method | Unit                       | Typical value |
|-----------------------------------|-----------------------------|-------------|----------------------------|---------------|
| <b>Physical</b>                   |                             |             |                            |               |
| Density                           |                             | ASTM D792   | -                          | 1.24          |
| Shrinkage                         |                             | ASTM D955   | %                          | 0.5~1.1       |
| Water Absorption                  | 23℃, H <sub>2</sub> O, 24hr | ASTM D570   | %                          | 1.2           |
| <b>Mechanical</b>                 |                             |             |                            |               |
| Tensile Strength at Break (3.2mm) | 5 mm/min                    | ASTM D638   | MPa                        | 120           |
| Elongation at Break (3.2mm)       | 5 mm/min                    | ASTM D638   | %                          | -             |
| Flexural Strength (3.2mm)         | 5 mm/min                    | ASTM D790   | MPa                        | 210           |
| Flexural Modulus (3.2mm)          | 5 mm/min                    | ASTM D790   | MPa                        | 5,600         |
| Izod Impact Strength (6.4mm)      |                             | ASTM D256   |                            |               |
| (Notched)                         | 23 ℃                        |             | J/m                        | 55            |
| Rockwell Hardness                 | R scale                     | ASTM D785   | -                          | 120           |
| <b>Thermal</b>                    |                             |             |                            |               |
| Melting Point                     | 20 ℃/min                    | ASTM D1525  | ℃                          | 260           |
| Heat Deflection Temperature       | 1.8 MPa                     | ASTM D648   | ℃                          | 235           |
| Coefficient of linear expansion   |                             | ASTM D696   | × 10 <sup>-4</sup> cm/cm·℃ | -             |

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



Processing Guide (Injection Molding)

|                                 |                               |         |         |         |
|---------------------------------|-------------------------------|---------|---------|---------|
| Drying Temperature(℃)           | 80 ~ 90 (Dehumidifying Dryer) |         |         |         |
| Drying Time(hr)                 | 3~5                           |         |         |         |
| Processing Moisture Contents(%) | ≤ 0.1                         |         |         |         |
| Cylinder Temperature(℃)         | Nozzle                        | Front   | Middle  | Rear    |
|                                 | 280~310                       | 280~310 | 270~300 | 260~290 |
| Mold Temperature(℃)             | 60~100                        |         |         |         |

