KOLON PLASTICS, INC.

# Product Information

**Reinforced Grade**

## KOCETAL®

KOCETAL® refers to polyacetal resin of a copolymer type. And is a material of an excellent quality with features of excellent anti-friction/anti-wear, chemical-resistance, heat-resisting stability, precise dimensions and molding abilities. It is mainly applied in gear or roller, and is used for various purposes over the fields of cars, office equipment and living materials. Following POM (Brand name: made by our independent technology development, Kolon Plastics has developed low-VOCs (volatile KOCETAL) products that are organic chemicals) POM resin of the world-best quality with almost no emission during the process of formaldehyde that is harmful to human body for the first time in Korea.

# KOCETAL® GF703

**: KOCETAL® GF703 is glass fiber reinforced grade for high-stiffness.**

| Properties | | Test Method | Unit | Value |
|---|---|---|---|---|
| **Physical** | | | | |
| Specific Gravity | | ISO 1183 | $g/cm^3$ | 1.50 |
| Melt Index (190℃, 2.16kg) | | ISO 1133 | g/10min | 15.0 |
| Shrinkage | Flow/Transverse | ISO 294 | % | 0.76/1.30 |
| Water Absorption | 23℃, $H_2O$, 24hr | ISO 62 | % | 0.52 |
| **Mechanical** | | | | |
| Tensile Strength | 23℃ | ISO 527-1/2 | MPa | 120 |
| Tensile Elongation | 23℃ | ISO 527-1/2 | % | 4.0 |
| Flexural Strength | 23℃ | ISO 178 | MPa | 140 |
| Flexural Modulus | 23℃ | ISO 178 | MPa | 4,800 |
| Notched Charpy Impact Strength | 23℃ | ISO 179/1eA | $kJ/m^2$ | 6.5 |
| Rockwell Hardness | | ISO 2039-2 | M scale | 95 |
| **Thermal** | | | | |
| Melting Point | | ISO 11357-1 | ℃ | 166 |
| Heat Deflection Temperature | | ISO 75 | | |
| | 1.8 MPa | | ℃ | 160 |
| Flammability(0.8mm) | | UL94 | | HB |

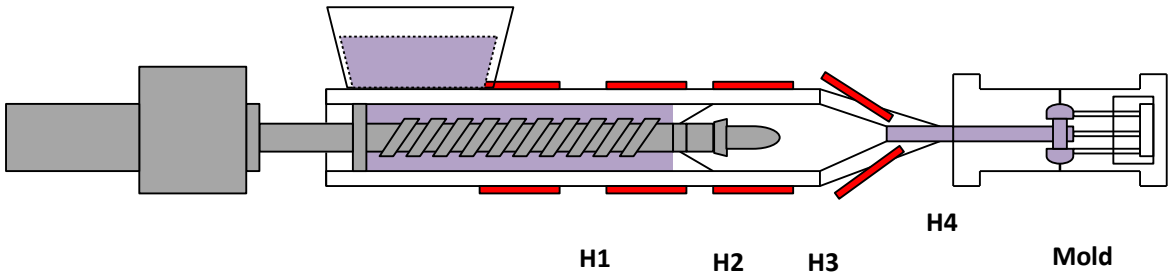
KOLON PLASTICS, INC.

ISO TS16949

## Electrical

| | | | |
|---|---|---|---|
| Dielectric strength | IEC 60243 | kV/mm | 19 |
| Volume Resistivity | IEC 60093 | Ω·cm | $1\times 10^{14}$ |
| Surface Resistivity | IEC 60093 | Ω | $1\times 10^{16}$ |

## Processing Guide (Injection Molding)




| | H1 | H2 | H3 | H4 |
|---|---|---|---|---|
| Cylinder Temperature(℃) | 180 | 200 | 200 | 210 |
| Mold Temperature(℃) | 70~120 | | | |
| Limitation of Processing Temp. (℃) | 220 | | | |
| Pre-drying | 80~90℃, 3 hrs | | | |