# TRIREX® Compound 3DP-3020C20

**Samyang Corporation - *Polycarbonate***

## General Information

**Product Description**

Samyang's AM BU is developing 3D printing materials through differentiated compound technology.
Samyang commercialized polycarbonate for filament that can be used for a FDM (Fused Deposition Modeling) printer.
Samyang is expanding its portfolio of 3D printing materials by developing composite materials. (CLFT, GLFT)

| General | | | |
|---|---|---|---|
| Material Status | • Commercial: Active | | |
| Availability | • Asia Pacific | • Europe | • North America |
| Uses | • Additive Manufacturing (3D Printing) | | |

## Properties [1]

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density / Specific Gravity | 1.27 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg) | 6.0 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow (0.118 in) | 5.0E-3 to 7.0E-3 | in/in | ASTM D955 |
| Water Absorption (24 hr, 73°F) | 0.15 | % | ASTM D570 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Strength (Break) | 19900 | psi | ASTM D638 |
| Tensile Elongation (Yield) | 3.0 | % | ASTM D638 |
| Flexural Modulus | 171000 | psi | ASTM D790 |
| Flexural Strength (Yield) | 25600 | psi | ASTM D790 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact (73°F, 0.125 in) | 1.8 | ft·lb/in | ASTM D256 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load (264 psi, Unannealed) | 223 | °F | ASTM D648 |

## Notes

[1] Typical properties: these are not to be construed as specifications.