# P1130RCF

**Recycled Carbon Fiber Reinforced Impact-modified Nylon 6**

上緯綠金能股份有限公司
SWANCOR REGENER CO., LTD.

## Product Description

P1130RCF is comprised of impact-modified PA6 and recycle carbon fiber., is balance stiffness and toughness. P1130RCF has good melting flow property and is suitable for injection molding to manufacture complex shape products of composite materials, such as automobile parts、bicycle parts or low temperature impact resistance parts, etc.

## Technical Data Sheet

| | Property | Unit | Test Method | P1130RCF |
|---|---|---|---|---|
| General properties | Content reinforcement | wt% | -- | 30 |
| | Specific gravity | g/cm³ | ISO 1183 | 1.22~1.24 |
| Mechanical Properties | Tensile modulus | Mpa | ISO 527-1,2 | 17000~18000 |
| | Tensile strength at break | Mpa | ISO 527-1,2 | 140~150 |
| | Elongation at break | % | ISO 527-1,2 | 2~3 |
| | Flexural strength | Mpa | ISO 178 | 12000~13000 |
| | Flexural strength | Mpa | ISO 178 | 210~220 |
| | Charpy impact strength(unnotched) | kJ/m² | ISO 179/1eA | 50~60 |
| Other Properties | Surface resistivity | Ohm | IEC 60093 | $10^{4-6}$ |
| | Melt Flow Index | g/10min | ASTM D1238 | 5~10 |

The above values is testing at 23℃, and only for reference of the selected grade





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## Drying method

Before injection molding process, we advise P1130RCF should be dehumidified by hopper dryer or either of these equipped with a dehumidifier can be used in hot-air blow-drying. The degree of drying achieved through hot-air blow-drying is determined by the pellet shape, initial and final water content, drying temperature and the temperature of and relative humidity of the dryer intake air. Drying condition recommendations please refer to the table below：

### Drying Conditions

| Properties | Unit | Value |
|---|---|---|
| Temperatures | ℃ | 80~100 |
| Time | hour | 4~10 |

## Injection molding recommendations

P1130RCF can be processed on commercially available injection molding machines with standard screws according to the recommendations of the machine manufacturer. To improve weld-line strength, we recommend that mold-wall temperatures are kept as high as possible, with adequate holding pressure times for reducing structure defect at wild line part. Injection molding recommendations please refer to the table below：

### Typical Injection Molding Conditions

| Properties | Unit | Value |
|---|---|---|
| Feed Zone | ℃ | 240~280 |
| Compression Zone | ℃ | 250~290 |
| Metering Zone | ℃ | 250~290 |
| Nozzle zone | ℃ | 240~280 |
| Mold Temperture | ℃ | 70~130 |
| Screw Speed | rpm | 30~50 |
| Injection speed | -- | High |
| Back Pressure | -- | Medium to maximum |

## Packaging

25Kg PE Inner-lined Paper Bag

## Storage

Keep away from ignition source; flame, pilot light, electrical sparks, and sparking tools. Do not store in direct sunlight. NO SMOKING.





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