



Sinochem Plastics Co., Ltd
Dongguan Chemerlon Plastics Co., Ltd

PC 5983**Description:**

Non-Halogen, High Impact Strength

Application:Electrical & Electronics,
Information Technology & Office Automation

| Properties | Test Method | Test Condition | Units | Typical Values |
|-------------------------------|-------------|----------------|-------------------|----------------|
| General | | | | |
| Density | ASTM D792 | 23°C | g/cm ³ | 1.2 |
| Mold Shrinkage | ASTM D955 | 2mm | % | 0.5-0.7 |
| Melt Flow Rate | ASTM D1238 | 300°C, 1.2kg | g/10min | 10 |
| Flammability | UL94 | 1.5mm | Class | V0 |
| Mechanical | | | | |
| Tensile Strength | ASTM D638 | 50mm/min | MPa | 65 |
| Elongation at break | ASTM D638 | 50mm/min | % | 100 |
| Flexural Strength | ASTM D790 | 2mm/min | MPa | 88 |
| Flexural Modulus | ASTM D790 | 2mm/min | MPa | 2400 |
| Impact Strength, IZOD notched | ASTM D256 | 3.2mm, 23°C | KJ/m ² | 70 |
| Thermal | | | | |
| Heat Distortion Temperature | ASTM D648 | 1.8Mpa, 6.4mm | °C | 125 |

- a. The above data is for the original color material, and the properties of the dyeing material may differ from the above data.
- b. Typical values refer to the average data of the laboratory, which are only used as reference and are not used as product standards.



Processing Conditions

| Processing Parameters | Range | |
|-----------------------------|------------------|-------------|
| Pre-drying Condition | 110°C-120°C, 4hr | |
| Injection Pressure | 60-100MPa | |
| Injection Speed | 50-80 | |
| Mold Temperature | 100°C | |
| Processing Temperature Max. | 320°C | |
| Melt Temperature | 280°C | |
| Cylinder Temperature | Feeding | 240°C-260°C |
| | Compressing | 270°C-290°C |
| | Nozzle | 280°C-300°C |

The above values are only for reference, and can be adjusted according to the size, thickness and requirements of the product.

Note:

- 1.The resin should not contact with dust and sundries in processing.
- 2.Do not stay the resin in the heating tube for a long time during the injecting cycle.
- 3.The temperature of the hot runner should not be too high to avoid material degradation.
- 4.The moisture control is one of the keys to ensure the quality of products in processing.

Safety and Handling Precautions:

- 1.The following is only a general note for the resin supplied. So safety requirements must be understood for all kinds of additives, processing acids and other materials used in secondary processing.
- 2.In normal conditions, there are no special problems with human inhalation, eye and skin contact, however, it should still be taken care when handling, storing, using or disposing these resins. The workplace should be clean to avoid dust accumulation. It should be avoided to contact with molten resin as much as possible in processing.
3. Dust and gas will be generated during the manufacturing process of plastic resin products. Dust from sawing, filing, sanding, etc., injection molded parts can irritate the eyes and respiratory tract. In a dusty environment, it is recommended to use respirators or masks that have been approved by the department.
4. According to the requirements of the correct operation procedures, the plastic processing area should be good ventilation, and the smoke from decomposition substances will be released when the plastic exceeds the melting temperature in processing, which may be irritating. In most cases, good ventilation is sufficient. When necessary, local ventilation should be used.
- 5.The product will be yellowed under ultraviolet rays, so the product should be stored far from direct sunlight.
- 6.Chemerlon recommends that the end use of their products should be investigated for users in advance to ensure the correct use of our products. In order to ensure that Chemerlon products are not misused, it is recommended to contact technical department or business department from Chemerlon Corporation.

Note:

As operating conditions and applicable laws may vary according to place and time, it is customer's responsibility to determine whether the products herein are appropriate for the customer's use and to ensure that their workplace and the manner for handling products which comply with applicable laws and other government regulations.

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