

**GF-PET ( Glassfiber Reinforced Polyethylene Terephthalate )**

**FR-PET®**

BN9030

Flame Retardant,  
Standard

**POLYPLASTICS CO., LTD.**

# General Properties of BN9030

table1-1 General Properties (ISO)

| Item                                                                                  | Unit                  | Test Method             | Flame Retardant,<br>Standard                                  |
|---------------------------------------------------------------------------------------|-----------------------|-------------------------|---------------------------------------------------------------|
|                                                                                       |                       |                         | BN9030                                                        |
|                                                                                       |                       |                         | Moldable at low<br>temperature, GF<br>reinforced, Black color |
| Color                                                                                 |                       |                         | -                                                             |
| ISO(JIS)quality-of-the-material display:                                              |                       | ISO11469<br>(JIS K6999) | >PET-GF30 FR(17)<                                             |
| Density                                                                               | g/cm <sup>3</sup>     | ISO 1183                | 1.66                                                          |
| Water absorption (23°C,24hrs,1mmt)                                                    | %                     | ISO 62                  | 0.1                                                           |
| Tensile strength                                                                      | MPa                   | ISO 527-1,2             | 139                                                           |
| Strain at break                                                                       | %                     | ISO 527-1,2             | 2                                                             |
| Flexural strength                                                                     | MPa                   | ISO 178                 | 214                                                           |
| Flexural modulus                                                                      | MPa                   | ISO 178                 | 10,100                                                        |
| Charpy notched impact strength (23°C)                                                 | kJ/m <sup>2</sup>     | ISO 179/1eA             | 7.5                                                           |
| Temperature of deflection under load (1.8MPa)                                         | °C                    | ISO 75-1,2              | 227                                                           |
| Coefficient of linear thermal expansion (Normal<br>temperature, Flow direction)       | x10 <sup>-5</sup> /°C | Our standard            | -                                                             |
| Coefficient of linear thermal expansion (Normal<br>temperature, Transverse direction) | x10 <sup>-5</sup> /°C | Our standard            | -                                                             |
| Electric strength (3mmt)                                                              | kV/mm                 | IEC 60243-1             | 20                                                            |
| Volume resistivity                                                                    | Ω·cm                  | IEC 60093               | 1 × 10 <sup>16</sup>                                          |
| Tracking resistance (CTI)                                                             | V                     | IEC 60112               | 250                                                           |
| Flammability                                                                          |                       | UL94                    | V-0                                                           |
| The yellow card File No.                                                              |                       |                         | E213445                                                       |
| Appropriate List number of Ministerial<br>Ordinance for Export Trade Control          |                       |                         | Item 16 of Appendix -1                                        |

All figures in the table are the typical values of the material and not the minimum values of the material specifications.



## NOTES TO USERS

- All property values shown in this brochure are the typical values obtained under varying conditions prescribed by applicable standards and test methods.
- This brochure has been prepared based on our own experiences and laboratory test data, and therefore all data shown here are not always applicable to parts used under different conditions. We do not guarantee that these data are directly applicable to the application conditions of users and we ask each user to make his own decision on the application.
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- Please contact our office for any questions about products we supply, descriptive literatures or any description in this brochure.

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