

# ABS

/Acrylonitrile Butadiene Styrene/



- ✓ High Impact Resistance
- ✓ High Light Transmission
- ✓ Good Toughness
- ✓ Good Fluidity



## ■ Material Overview

Combining high strength, high toughness, and superb heat resistance, ABS can readily tackle intricate designs and demanding conditions during model building, making it a perfect option for industrial prototyping, artistic figures, and beyond.



|                   |                                                                    |
|-------------------|--------------------------------------------------------------------|
| Filament Diameter | 1.75mm/2.85mm/ 3.50mm                                              |
| Net Weight        | 1KG \ Inner Box Dimension: 206*71*208mm \ G.W.: 1.35KG             |
| Package           | 1KG*10PCs \ Outer Carton Dimension: 382*226*433mm \ G.W.: 14KG/CTN |

## ■ Printing Tips

- Best printing temperature ranges from 220°C to 250°C
- Best phototype can be achieved through 50°C drying for 2-4 hours
- Print Temp: 250-260°C 50-100mm/s
- Print Temp: 260-280°C 100-200mm/s
- Platform Temp.: 80-100°C
- Bubble: 100% no bubble
- Melt Mass Flow Rate: 12-19g/10min
- (220°C,10kg) \* Breaking Elongation: 25%

## ■ Colors

Nature  Black  Red  Yellow  Blue  Green  Purple  
 Pink  Gold  Silver  Orange  Grey  Glow blue  Glow green  
 (Standardized pantone colors are available)

## ■ Data Table

| Physical Properties                 | Standard Value              | Test Method   |
|-------------------------------------|-----------------------------|---------------|
| Density                             | 1.05-1.18g /cm <sup>3</sup> | ASTM D792     |
| MFR (220°C, 2.16KG)                 | 12-19g / 10 minutes         | ASTM D1238    |
| Water absorption (saturation, 23°C) | 0.3%                        | ASTM D570     |
| Mechanical Properties               | Standard Value              | Test Method   |
| Tensile strength                    | ≥46 MPa                     | ASTM D638     |
| Flexural strength                   | ≥46 MPa                     | ASTM D638     |
| Tensile modulus                     | ≥2,270 MPa                  | ASTM D638     |
| Notch impact strength (IZOD, 23°C)  | ≥3KJ/m <sup>2</sup>         | ISO 180       |
| Elongation at break                 | ≥3.0%                       | ASTM D638     |
| Accuracy                            | Standard Value              | Test Method   |
| Filament diameter                   | 1.75mm/2.85mm/3.50mm        | Q/WT 001-2014 |
| Roundness deviation                 | ≤0.02mm                     | Q/WT 001-2014 |