

PRODUCT DATA SHEET

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|-----------------|-------------|------|
| TRADEMARK | GRADE | type |
| UMG ABS® | TJ3G | - |

| | TEST METHOD | CONDITION | UNIT | Typical property value |
|-----------------------------------------|-------------|---------------------|------------------------|------------------------|
| Charpy Impact Strength,(Notched) | ISO 179 | 23 deg.C | kJ/m ² | 11 |
| | | -30 deg.C | | 4 |
| Tensile Strength | ISO 527 | 23 deg.C | MPa | 50 |
| Tensile Modulus | | 23 deg.C | MPa | 2500 |
| Flexural Strength | ISO 178 | 23 deg.C 2mm/min | MPa | 82 |
| Flexural Modulus | | | MPa | 2750 |
| Rockwell Hardness | ISO 2039 | 23 deg.C | R-scale | 111 |
| T.D.U.L. | ISO 75 | 1.80MPa Flatwise | deg.C | 82 |
| Density | ISO 1183 | 23 deg.C | g/cm ³ | 1.05 |
| Melt Volume Flow Rate | ISO 1133 | 220deg.C | cm ³ /10min | 20 |
| Mold Shrinkage ^{note)} | ISO 294-4 | 23 deg.C | % | 0.4-0.6 |
| Coefficient of Linear Thermal Expansion | ISO 11359-2 | - | cm/cm/deg. C(x10-5) | 8 |
| UL Flame Rating | UL 94 | - | mm | 0.95-3.0 HB |
| | | - | mm | - |
| | | - | mm | - |

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note)Mold shrinkage valus are determined along the parrarel of flow direction and will depend on the molding conditions,such as holding pressure etc, so please ask our technical service in advance for applying to the mold design.

Numeric values shown in the tables are the Typical values of natural colors obtained based on predetermined testing methods and thus are not guaranteed values. Also, the numeric values for colored products may slightly vary depending upon the kind and quantity of pigment used.

Also, these values are subject to change as a result of improvement in the physical properties.

Be sure to read in advance Safety Data Sheet (SDS) to safely handle our products. You can obtain and use the SDS from our SALES DEPARTMENT

Information described on these sheets was obtained based on specific conditions and thus UMG ABS, Ltd. will not guarantee that you can always obtain the same results as described here from the use of our product.

Also, UMG ABS, Ltd. is unable to guarantee the quality and safety of your products manufactured by using our products or any information proposed by our company.Your company by itself has to judge the suitability of the materials to your products.

Also pay full attention to legal restrictions and industrial properties.