



## **ABS SH625**

**Extrusion Molding Grade** 

Description

High Impact, High Flow

## **Application**

Ski Flat, Miscellous

| Properties                         | <b>Test Condition</b> | Test Method | Unit               | Typical Value |
|------------------------------------|-----------------------|-------------|--------------------|---------------|
| Physical                           |                       |             |                    |               |
| Specific Gravity                   |                       | ASTM D792   | -                  | 1.04          |
| Molding Shrinkage (Flow), 3.2mm    |                       | ASTM D955   | %                  | 0.4~0.7       |
| Melt Flow Rate                     | 220℃/10kg             | ASTM D1238  | g/10min            | 7             |
| Mechanical                         |                       |             |                    |               |
| Tensile Strength, 3.2mm            |                       | ASTM D638   |                    |               |
| @ Yield                            | 50mm/min              |             | kg/cm <sup>2</sup> | 350           |
| Tensile Elongation, 3.2mm          |                       | ASTM D638   |                    |               |
| @ Yield                            | 50mm/min              |             | %                  | >5            |
| @ Break                            | 50mm/min              |             | %                  | 35            |
| Tensile Modulus, 3.2mm             | 1mm/min               | ASTM D638   | kg/cm <sup>2</sup> |               |
| Flexural Strength, 3.2mm           | 15mm/min              | ASTM D790   | kg/cm <sup>2</sup> | 500           |
| Flexural Modulus, 3.2mm            | 15mm/min              | ASTM D790   | kg/cm <sup>2</sup> | 15,000        |
| Tear Strength @ Break              | 50mm/min              | ASTM D624   | kg/cm              |               |
| IZOD Impact Strength, 6.4mm        |                       | ASTM D256   |                    |               |
| (Notched)                          | 23℃                   |             | kg-cm/cm           | 47            |
| ,                                  | -30℃                  |             | kg-cm/cm           |               |
| IZOD Impact Strength, 3.2mm        |                       | ASTM D256   |                    |               |
| (Notched)                          | <b>23</b> ℃           |             | kg-cm/cm           | 55            |
|                                    | -30℃                  |             | kg-cm/cm           |               |
| Rockwell Hardness                  | R-Scale               | ASTM D785   | -                  | 95            |
| Thermal                            |                       |             |                    |               |
| Heat Deflection Temperature, 6.4mm |                       | ASTM D648   |                    |               |
| (Unannealed)                       | 18.6kg                |             | ${\mathbb C}$      | 85            |
|                                    | 4.6kg                 |             | ${\mathbb C}$      | 90            |
| Heat Deflection Temperature, 6.4mm |                       | ASTM D648   |                    |               |
| (annealed)                         | 18.6kg                |             | ${\mathbb C}$      | 86            |
|                                    | 4.6kg                 |             | ${\mathbb C}$      | 91            |
| Vicat Softening Temperature        |                       | ASTM D1525  |                    |               |
|                                    | 5kg, 50 ℃/h           |             | ${\mathbb C}$      | 90            |
|                                    | 1kg, 120 ℃/h          |             | ${\mathbb C}$      |               |
| Flammability                       |                       | UL94        |                    |               |
| -                                  |                       |             | class              |               |

Note) Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Values given should not be interpreted as specification and not be used for part or tool design.

All properties, except melt flow rate are measured on injection molulded specimens and after 48 hours storage at 23 °C, 50% relative humidty.

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## Processing Guide (Extrusion Molding)

| Processi                     | Processing Parameters Uni |               | Value     |
|------------------------------|---------------------------|---------------|-----------|
| Drying Temperature           |                           | ${\mathbb C}$ | 70 ~ 80   |
| Drying Time                  |                           | hrs           | 3 ~ 4     |
| Recommended Moisture Content |                           | %             | Max. 0.1  |
| Melt Temperature             |                           | ${\mathbb C}$ | 200 ~ 250 |
| Barrel Temperature           | Zone 1                    | ${\mathbb C}$ | 180 ~ 210 |
|                              | Zone 2                    | ${\mathbb C}$ | 190 ~ 230 |
|                              | Zone 3                    | ${\mathbb C}$ | 200 ~ 250 |
|                              | Zone 4                    | ${\mathbb C}$ | 200 ~ 250 |
| Adapter Temperature          |                           | ${\mathbb C}$ | 200 ~ 250 |
| Die Temperature              |                           | ${\mathbb C}$ | 200 ~ 250 |
| Roll Stack Tempeature        | Тор                       | ${\mathbb C}$ | 70 ~ 100  |
|                              | Middle                    | ${\mathbb C}$ | 70 ~ 90   |
|                              | Bottom                    | ${\mathbb C}$ | 60 ~ 90   |

Note) Recommend initial lower temperatures settings to avoid material degradation/hang-up in die & purge material from extruder prior to shutdown.

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