# ELIX™ ABS H605

Acrylonitrile Butadiene Styrene

**ELIX Polymers, S. L.**

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## Technical Data

| Product Description | | | |
|---|---|---|---|
| ELIX ABS H605<br>Improved heat resistance, low emissions, easy-flowing.<br>ISO Shortname: ISO 2580-1 -ABS 0, MG, 105-30-16-25 | | | |
| **General** | | | |
| Material Status | • Commercial: Active | | |
| Literature [1] | • Technical Datasheet (English) | | |
| UL Yellow Card [2] | • E350602-101011316 | | |
| Search for UL Yellow Card | • ELIX Polymers, S. L.<br>• ELIX™ ABS | | |
| Availability | • Europe | • North America | |
| Features | • Good Flow | • High Heat Resistance | • Low Emissions |
| Forms | • Pellets | | |
| Part Marking Code (ISO 2580) | • ABS 0, MG, 105-30-16-25 | | |

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Density | 1.05 | g/cm³ | ISO 1183 |
| Melt Volume-Flow Rate (MVR) (220°C/10.0 kg) | 25.0 | cm³/10min | ISO 1133 |
| Molding Shrinkage [4] | | | ISO 294-4 |
| Across Flow | 0.40 to 0.60 | % | |
| Flow | 0.40 to 0.60 | % | |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus (23°C) | 2400 | MPa | ISO 527-2/1 |
| Tensile Stress (Yield, 23°C) | 47.0 | MPa | ISO 527-2/50 |
| Tensile Strain | | | ISO 527-2/50 |
| Yield, 23°C | 2.5 | % | |
| Break, 23°C | > 15 | % | |
| Flexural Modulus [5] (23°C) | 2400 | MPa | ISO 178 |
| Flexural Stress [5] (23°C) | 72.0 | MPa | ISO 178 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Charpy Notched Impact Strength | | | ISO 179/1eA |
| -30°C | 7.0 | kJ/m² | |
| 23°C | 17 | kJ/m² | |
| Charpy Unnotched Impact Strength | | | ISO 179/1eU |
| -30°C | 80 | kJ/m² | |
| 23°C | 90 | kJ/m² | |
| Notched Izod Impact Strength | | | ISO 180/1A |
| -30°C | 7.0 | kJ/m² | |
| 23°C | 17 | kJ/m² | |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Ball Indentation Hardness | 105 | MPa | ISO 2039-1 |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Heat Deflection Temperature | | | |
| 0.45 MPa, Annealed | 102 | °C | ISO 75-2/B |
| 1.8 MPa, Annealed | 98.0 | °C | ISO 75-2/A |
| Vicat Softening Temperature | 101 | °C | ISO 306/B50 |



Form No. TDS-161790-en

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Document Created: Tuesday, January 12, 2016
Added to Prospector: May, 2012
Last Updated: 12/14/2015

| Electrical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Electric Strength (23°C, 1.00 mm) | 33 | kV/mm | IEC 60243-1 |
| Relative Permittivity | | | IEC 60250 |
| 23°C, 100 Hz | 3.10 | | |
| 23°C, 1 MHz | 3.00 | | |
| Dissipation Factor | | | IEC 60250 |
| 23°C, 100 Hz | 5.0E-3 | | |
| 23°C, 1 MHz | 8.0E-3 | | |
| Comparative Tracking Index (Solution A) | 600 | V | IEC 60112 |

| Flammability | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Burning Rate [6] (2.00 mm) | 60 | mm/min | ISO 3795 |
| Flame Rating (1.60 mm) | HB | | UL 94 |
| Glow Wire Flammability Index (2.00 mm) | 700 | °C | IEC 60695-2-12 |

| Injection | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Processing (Melt) Temp | 240 | °C | |
| Mold Temperature | 70.0 | °C | |
| Injection Velocity | 240 | mm/sec | ISO 294 |

## Notes

[1] These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

[2] A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

[3] Typical properties: these are not to be construed as specifications.

[4] 60x60x2

[5] 2.0 mm/min

[6] US - FMVSS



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