

Ultramid® A3HG5 BK00565

Polyamide 66

BASF Corporation

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

Ultramid A3HG5 BK00565 is a 25% glass fiber reinforced, pigmented black, injection molding PA66 grade.

Applications

Typical applications include machinery components and housings of high stiffness and dimensional stability.

General

| | |
|---------------------------|--|
| Material Status | • Commercial: Active |
| Literature ¹ | • Technical Datasheet (English) |
| Search for UL Yellow Card | • BASF Corporation • Ultramid® |
| Availability | • North America |
| Filler / Reinforcement | • Glass Fiber, 25% Filler by Weight |
| Features | • High Dimensional Stability • High Stiffness |
| Uses | • Housings • Machine/Mechanical Parts |
| Agency Ratings | • EC 1907/2006 (REACH) |
| RoHS Compliance | • RoHS Compliant |
| Appearance | • Black |
| Forms | • Pellets |
| Processing Method | • Injection Molding |

| Physical | Nominal Value Unit | Test Method |
|----------|------------------------|-------------|
| Density | 1.32 g/cm ³ | ISO 1183 |

| Mechanical | Nominal Value Unit | Test Method |
|------------------------------|--------------------|-------------|
| Tensile Modulus (23°C) | 8500 MPa | ISO 527-1 |
| Tensile Stress (Break, 23°C) | 168 MPa | ISO 527-2 |
| Tensile Strain (Break, 23°C) | 2.9 % | ISO 527-2 |
| Flexural Modulus (23°C) | 7770 MPa | ISO 178 |
| Flexural Stress (23°C) | 240 MPa | ISO 178 |

| Impact | Nominal Value Unit | Test Method |
|----------------------------------|-----------------------|-------------|
| Charpy Notched Impact Strength | | ISO 179 |
| -40°C | 6.8 kJ/m ² | |
| 23°C | 7.8 kJ/m ² | |
| Charpy Unnotched Impact Strength | | ISO 179 |
| -30°C | 44 kJ/m ² | |
| 23°C | 55 kJ/m ² | |
| Notched Izod Impact Strength | | ISO 180 |
| -40°C | 7.0 kJ/m ² | |
| 23°C | 7.9 kJ/m ² | |

| Thermal | Nominal Value Unit | Test Method |
|-----------------------------------|--------------------|-------------|
| Deflection Temperature Under Load | | |
| 0.45 MPa, Unannealed | 262 °C | ISO 75-2/B |
| 1.8 MPa, Unannealed | 250 °C | ISO 75-2/A |
| Melting Temperature (DSC) | 260 °C | ISO 3146 |



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| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 80 | °C |
| Drying Time | 2.0 to 4.0 | hr |
| Suggested Max Moisture | 0.15 | % |
| Processing (Melt) Temp | 280 to 305 | °C |
| Mold Temperature | 80 to 90 | °C |
| Injection Pressure | 3.50 to 12.5 | MPa |
| Injection Rate | Fast | |

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



Where to Buy

Supplier

BASF Corporation

Wyandotte, Wyandotte USA

Telephone: 800-545-8359

Web: <https://www.basf.com/us/en.html>

Distributor

Amco Polymers

Telephone: 800-262-6685

Web: <http://www.amcopolymers.com/>

Availability: North America

Entec Polymers

Telephone: 833-319-0299

Web: https://www.entecpolymers.com/?utm_source=ul&utm_medium=paid%20association&utm_campaign=entec%20%7C%20entec%201&utm_term=ul%20%7C%20where%20to%20buy

Availability: North America

Entec Polymers Latin America

Contact Entec Polymers for availability of individual products by country.

Web: <https://www.entecpolymers.com/>

Availability: Latin America

M. Holland Canada Company

Telephone: 905-665-1168

Web: <http://www.mholland.com/>

Availability: Canada

M. Holland Company

Telephone: 855-497-1403

Web: <http://www.mholland.com/>

Availability: Mexico, United States

Nexeo Plastics

Nexeo Plastics is leading global resin distributor with the technical resources you need to overcome material challenges. Visit us on the web at www.nexeoplastics.com.

Telephone: 833-446-3936

Web: <https://www.nexeoplastics.com/>

Availability: North America

