

# THERMELT 858 Black

## **POLYAMIDE HOT MELT RESIN**

#### KEY BENEFITS

- Enhanced UV resistance versus standard PA
- High hardness and cohesion
- Flammability UL94 : V0 (UL file E116659)



THERMELT 858 black is a pure copolymer polyamide hot melt resin, non reactive and solvent free, specially designed for Low Pressure Molding applications.

#### **APPLICATIONS**

THERMELT 858 is mainly used for molding of electronic/electric components, connectors and cables.

| SPECIFICATIONS                               |        |          |               |
|--|--------|----------|---------------|
| PHYSICAL PROPERTIES                          |        | VALUE    | STANDARD TEST |
| Viscosity Brookfield<br>(220°C, SC4, 50 RPM) | [Pa.s] | 4.0-6.0  | ASTM D3236    |
| Softening point                              | [°C]   | 175-185  | ASTM D3461    |
| Water Content                                | [%]    | < 0.2    | Bostik        |
| Commercial shape                             |        | Pellets  |               |
| Packaging                                    |        | 20Kg bag |               |

| INDICATIVE VALUE                         |      |       |               |  |
|--|------|-------|---------------|--|
| THERMAL PROPERTIES                       |      | VALUE | STANDARD TEST |  |
| Vicat temperature<br>(A 120)             | [°C] | 77    | ISO306        |  |
| Glass transition<br>(DSC)                | [°C] | - 35  | Bostik        |  |
| MECHANICAL PROPERTIES                    |      | VALUE | STANDARD TEST |  |
| Yield strength<br>(50 mm/min, 23°C)      | MPa] | 7.2   | ISO 527       |  |
| Strength at break<br>(50 mm/min, 23°C)   | MPa] | 8.1   | ISO 527       |  |
| Elongation at break<br>(50 mm/min, 23°C) | [%]  | 340   | ISO 527       |  |
| Young modulus<br>(50 mm/min, 23°C)       | MPa] | 90    | ISO 527       |  |

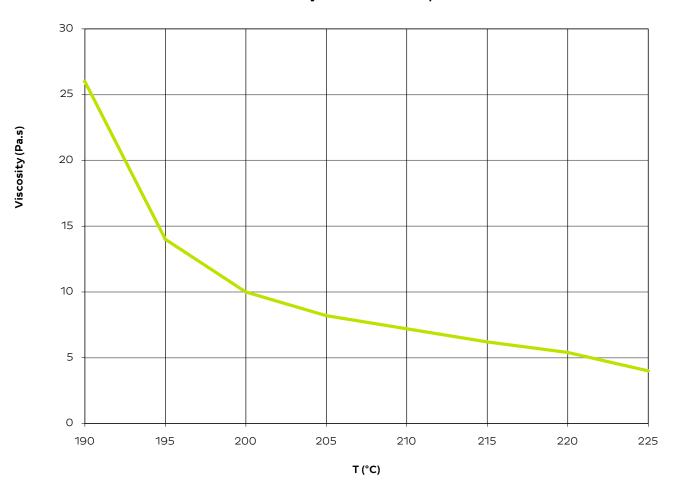


| INDICATIVE VALUE                      |                      |                      |               |  |
|---------------------------------------|----------------------|----------------------|---------------|--|
| MISCELLANEOUS PROPERTIES              |                      | VALU<br>E            | STANDARD TEST |  |
| Density                               |                      | ~1                   | Internal test |  |
| Water absorption<br>(immersed, 23°C)  | [%]                  | 1,9                  | ISO 62        |  |
| Hardness [Sh<br>(23°C)                | ore D]               | 49                   | ISO 868       |  |
| ELECTRICAL PROPERTIES                 |                      | VALU<br>E            | STANDARD TEST |  |
| Transversal resistivity (500V)        | [Ω.cm]               | 1,4.10 <sup>11</sup> | IEC 60093     |  |
| Dielectric rigidity<br>(23°C)         | [kV.mm <sup>-</sup>  | 20                   | IEC 60243-1   |  |
| Relative permittivity<br>(50Hz, 23°C) | [F.m <sup>-1</sup> ] | 5.6                  | IEC 60250     |  |

| PROCESSING CONDITIONS                     |      |         |
|---|------|---------|
| RECOMMENDED PARAMETERS                    |      | VALUE   |
| Melt Temperature Range                    | [°C] | 210-230 |
| Mold Temperature Range                    | [°C] | 20-60   |
| <b>Drying Time</b> (Air oven, thin layer) | [h]  | 8       |
| Drying Temperature                        | [°C] | 70      |
| Processing Moisture Content               | [%]  | < 0.2   |

THERMELT 858 can be used in both melter and extruder.

#### Viscosity curve versus temperature



### STORAGE STABILITY

The product has a shelf life of 18 months when properly stored in a cool and dry location in closed original packing.

Thermelt 858 will absorb moisture from the air. Because of risk of moisture absorption, we highly recommend to store any open bag in a close container.

#### **REGULATION**

No substance mentioned in the candidate list of SVHC for authorization published by the European Chemical Agency (16/12/2013), is present at a concentration higher than 0.1% (w/w).

We certify that our products comply with the European directive 2011/65/EU, also called the RoHS directive. We don't introduce intentionally phthalate derivatives or Phosphorus Elemental (CAS 7723-14-0) in the manufacturing of our Polyamide adhesives.

MSDS is available on www.quick-fds.com

The information given and recommendations made herein are based on Bostik's research only and are not guaranteed to be accurate. The performance of the product, its shelf life, and application characteristics will depend on many variables, including the kind of materials to which the product will be applied, the environment in which the product is stored or applied, and the equipment used for application. Any change in any of these variables can affect the product's performance. It is the buyer's obligation, prior to using the product, to test the suitability of the product for an intended use under the conditions that will exist at the time of the intended use. Bostik does not warrant the product's suitability for any particular application. The product is sold pursuant to Bostik's Terms and Conditions of Sale that accompanies the product at the time of sale. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute permission, inducement, or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

#### SMART HELP

Please contact your local representative