



# BOSTIK

## THERMELT® 870 Natural

### POLYAMIDE HOT MELT RESIN

#### KEY FEATURES

- Fast setting time
- Good wettability
- Flammability UL94: V0

#### PRODUCT DESCRIPTION

Resin Thermelt® 870 natural is a pure copolyamide hot melt resin and non-reactive, specially designed for Low Pressure Molding applications.

#### FEATURES

- Good wetting properties at application temperature,
- A fast setting time,
- A medium open time,
- A good flexibility.

This resin is in accordance with UL94 V0.

#### APPLICATIONS

Resin Thermelt® 870 natural is mainly used for molding of electronic/electric components, connectors and cables.

#### PHYSICAL PROPERTIES

| INDICATIVE DATA   | VALUE        | STANDARD TEST |
|---|--------------|---------------|
| <b>Viscosity Brookfield</b><br>(210°C, SC4-S27, 50 RPM) | [Pa.s] 4.8   | ASTM D3236    |
| <b>Softening point</b><br>(Cup and Ball)                | [°C] 147     | ASTM D3461    |
| <b>Water content</b>                                    | [%] <0.2     | Bostik        |
| <b>Hardness</b><br>(23°C, 15s)                          | [Shore D] 23 | ISO 868       |
| <b>Density</b>  | ~1           | Internal test |
| <b>Water absorption</b><br>(Immersed 7 days, 23°C)      | [%] 1.4      | ISO 62        |
| <b>Glass transition</b><br>(DSC)                        | [°C] -10     | Bostik        |
| <b>Flammability</b><br>(UL file E116659)                | V0           | UL 94         |
| <b>Colour</b>   | Natural      |               |
| <b>Commercial shape</b>                                 | Pellets      |               |

## THERMELT®

#### MECHANICAL PROPERTIES

| INDICATIVE DATA                                 | VALUE      | STANDARD TEST |
|---|------------|---------------|
| <b>Max Stress</b><br>(50 mm/min, 23°C)          | [MPa] >3.5 | ISO 527       |
| <b>Elongation at break</b><br>(50 mm/min, 23°C) | [%] >400   | ISO 527       |
| <b>Young modulus</b><br>(50 mm/min, 23°C)       | [MPa] 45   | ISO 527       |

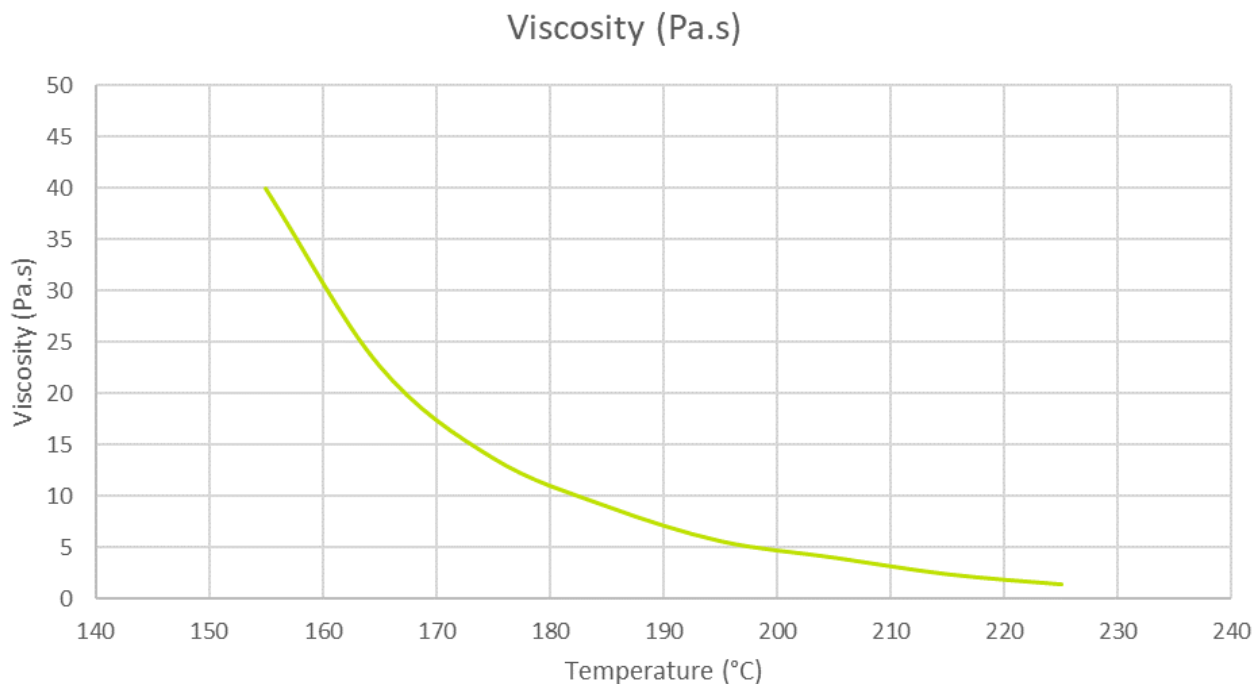
#### ELECTRICAL PROPERTIES

| INDICATIVE DATA                          | VALUE                     | STANDARD TEST |
|--|---------------------------|---------------|
| <b>Transversal resistivity</b><br>(500V) | [Ω.cm] 1.10 <sup>11</sup> | IEC 62631-3   |
| <b>Dielectric rigidity</b><br>(23°C)     | [kV.mm <sup>-1</sup> ] 20 | IEC 60243-1   |

#### PROCESSING CONDITIONS

| RECOMMENDED PARAMETERS                       | VALUE          |
|--|----------------|
| <b>Melt Temperature Range</b>                | [°C] 190 - 220 |
| <b>Mold Temperature Range</b>                | [°C] 20 - 60   |
| <b>Drying Time</b><br>(Air oven, thin layer) | [h] 6          |
| <b>Drying Temperature</b>                    | [°C] 80        |

Resin Thermelt® 870 natural can be used in both melter and extruder.



#### PACKAGING

For existing packaging sizes, please call your Bostik sales representative.

#### STORAGE STABILITY

The product has a shelf life of 18 months when properly stored in a cool and dry location in closed original packing. Resin Thermelt® 870 natural will absorb moisture from the air. Because of risk of moisture absorption, we highly recommend to store any open bag in a close container.

#### FURTHER INFORMATION

The following publication is available on request:

- Safety Data Sheets (SDS)
- Regulatory Information Sheet (RIS)

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**

