

Technical Data Sheet Ultrabond[®] 758

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Page 1 of 2

Product Description

Hernon[®] Ultrabond[®] 758 is a low viscosity self-leveling UV curable potting compound formulated to provide high performance, fast curing, coating and encapsulating of electronic components. This product is also used for shallow potting applications.

Product Benefits

- UV fluorescence for in-process inspection
- 100% solid system (no solvents)
- Excellent adhesion to a variety of surfaces
- Excellent environmental resistance
- Good gap filling properties
- No shrinkage due to solvent evaporation
- Rapid room temperature cure

Typical Properties (Uncured)

Property	Value
Chemical Type	Modified Acrylic Ester
Appearance	Clear liquid
Specific Gravity @ 25°C	1.04
Viscosity @ 25°C, cP	270–350
Flash Point	See MSDS

Typical Curing Performance

Ultrabond[®] 758 will cure rapidly at room temperature when exposed to high intensity ultraviolet light (365 nm).

Fixture and Tack Free Time

100mW/cm² at 365 nm

Property	Value (seconds)
Fixture time*, glass blocks	5
Tack free time	<20

*Fixture time is defined as the time to develop a shear strength of 0.1 N/mm².

Typical Properties (Cured)

Physical Properties

Property	Value
Coefficient of thermal expansion, K ⁻¹ , ASTM D696	80 × 10 ⁻⁶
Coefficient of thermal conductivity, W/(m·K), ASTM C177	0.1
Tensile strength, psi, ASTM D638	3250
Modulus, psi, ASTM D638	108000
Elongation, %, ASTM D638	85
Hardness, Shore B, ASTM D2240	95
Temperature range, °C, (°F)	-54 to 177 (-65 to 350)

Electrical Properties

Property	Value
Dielectric Strength, kV/mm, ASTM D149	36
Dielectric Constant at 1 kHz, ASTM D150	4.25
Dissipation Factor at 1 kHz, ASTM D150	0.03
Volume Resistivity, Ω·cm, ASTM D257	1.7 × 10 ¹⁵

Typical Cured Performance

Block- Shear Strength on different specimens
Tested according to ASTM D4501

Specimen	Cure Time	Value, psi
Glass to Glass	20 seconds	≥ 1000
Glass to Steel	20 seconds	≥ 400

General Information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Factors Affecting UV Curing

- Dark surfaces lengthen cure time.

- Full range (UV-A, B & C) lamps provide faster cures than filtered sources.
- All UV sources degrade with use. Check output with a radiometer.
- Thicker films require longer cures.
- Light intensity decreases as distance from UV source increases.
- Some clear plastics may contain UV inhibitors.

Precautions When Using UV Lamps

- Never look directly at UV source.
- Wear protective UV goggles
- Do not expose bare skin to high intensity UV light.
- Wear protective clothing.
- Use in a well-ventilated area. Some UV sources generate ozone. Provide shielding around high intensity UV sources.
- High intensity UV sources generate heat. Take appropriate precautions.

Storage

Ultrabond® 758 should be stored in a cool, dry location in unopened containers at a temperature between 45°F to 85°F (7°C to 29°C) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused material, do not return any material to its original container.

Dispensing Equipment

Heron® offers a complete line of semi and fully automated dispensing equipment. Contact **Heron® Sales** for additional information.

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