## TECHNICAL DATA SHEET

#### SUPERBOND HIGH MODULUS SILICONE SEALANT, 310ML



# 1. **PRODUCT DESCRIPTION:**

**SUPERBOND** is an easily applied, one part acetoxy high modulus silicone sealant. Outstanding adhesion to most common construction substrates, reacting with atmospheric moisture to form a durable and flexible seal.

**SUPERBOND** silicone sealant can withstand movement of +/- 25% in constant service, throughout a wide temperature range. Resistance to severe weathering is excellent.

#### 2. PROPERTIES:

**SUPERBOND** bonds strongly to clean uncoated glass, ceramics and glazed or painted surfaces, without the need to prime. For most other substrates it is recommended that a primer be used.

Once cured, **SUPERBOND** is resistant to many acids and bases diluted and salt spray and will tolerate short exposure to most industrial solvents and hydrocarbon cased products, in the latter case, some reversible swelling and softening will occur

The exceptional translucent quality of **SUPERBOND** is such that it is ideally suited for use where sealant is visually prominent, e.g. display cases and shop windows.

# 3. APPLICATIONS

Specifically developed for construction applications, **SUPERBOND** is ideal for sealing applications where joint load is high and relative movement between substrates is minimised. When used on external joints, a weather tight seal of high integrity will result.

Typical applications include; weather sealing, movement joints, perimeter joints, glazing joints, door and window frames, cladding and curtain walls, shop windows, display cases, panels and signs, portable buildings, caravans, boats, conservatories, greenhouses, HVAC ducting, clean rooms, tiling.

### 4. CHARACTERISTICS:

Before Curing: Type of sealant	Acetic
Specific gravity (non cured) approx>	1.04
Flow resistance (EN 27390), mm, approx Viscosity (strain 3000 N/m <sup>2</sup> , 20°C), Pa.s, approx	
Extrudability g/min (std NMRPS 495A 3mm.3bars), approx	
Curing: Skin formation time, mins, approx	7
Curing: Skin formation time, mins, approx Tack-free time, mins, approx	
	20
Tack-free time, mins, approx	20 4.5
Tack-free time, mins, approx Curing time—mm/1st day, approx	20 4.5 8 10

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# 4. CHARACTERISTICS (continued):

After Curing; Shore A hardness (ISO 868), approx Elastic recovery (EN 27389) %, approx Joint movement capability, % Operating temperatures °C, All colours	100 25
Mechanical properties on a 2mm thick film (NF T 46002): Modulus at 100% elongation, MPa, approx Tensile strength, MPa, approx Elongation at break % approx	2.1
Mechanical properties on samples in accordance with EN 28339; Modulus at 100% elongation, MPa, approx Tensile strength, MPa, approx Elongation at break % approx	1.0

#### 5. CONFORMITY TO SPECIFICATIONS:

**SUPERBOND** conforms to the requirements of ISO 11600 F&G 25LM, BS5889 (1989) type B, DIN 18545, TTS 001543A (class A).

#### 6. WORKING PROCEDURE:

Surface Preparation: All surfaces must be clean, dry and free from dust or traces of contaminants, which may affect adhesion. To degrease, wipe with a pad soaked in solvent then with a clean cloth. Dust should be removed using oil-free compressed air.

**SUPERBOND** sealant does not require a primer on most common substrates, except in the case of immersion or on certain substances such as cast, extruded or anodised aluminium, steels, ferrous metals, painted and most rigid plastics, concrete, wood. Please consult us for more information. The primer should preferably be applied using a soft hair paintbrush. In the case of particularly porous substrates, a second coat may be applied after the first one has dried.

Joint dimensions: The joint movement capability of sealants in addition to local regulations must be considered. In order to allow the sealant to operate under the best possible conditions, the minimum cross-section of the seal should be 5 x 5mm. For seals wider than 12mm, the thickness will generally be determined as being half this width.

Applying The Sealant: Once a seal backing material has been put in place (closed cell polyethylene foam with surface skin or open cell polyurethane foam), the sealant should be applied ensuring that the seal is completely filled and all air pockets or voids are eliminated. Tool the seal to ensure good contact between the sealant and the bonded surfaces. This should be carried out using a dry spatula before the surface skin is formed.

Areas soiled with fresh sealant may be cleaned with a dry pad or a pad soaked in a solvent (compatible with the substrate). Any cured sealant can be removed by scraping (e.g. using a razor blade).

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# 7. LIMITATIONS OF USE:

**SUPERBOND** sealant must not be used on sensitive surfaces which could react with the acetic acid which is released during cure, nor should it be used on materials where migration of constituents can take place, e.g. certain rubbers.

SUPERBOND must not be used for structural glazing applications.

**SUPERBOND** should not be painted, (due to poor coverage and adhesion of paints) and is not recommended where abrasion or physical abuse will be encountered. For all uses in permanent immersion, please consult us..

**SUPERBOND** (once cured) can be used in applications in which there is risk of occasional short term contact with water based foodstuffs, but under no circumstances should it be considered for use for permanent contact applications.

## 8. AVAILABLE COLOURS:

**SUPERBOND** Thick Bodied HMA is available in white, translucent, black, grey and brown.

### 9. PACKAGING:

**SUPERBOND** Thick Bodied HMA is supplied in 310ml cartridges, boxed in 25. Full pallet quantity is 1200 cartridges (48 boxes).

# 10. STORAGE AND SHELF LIFE:

**SUPERBOND** has a shelf life of 24 months from its date of manufacture (Date of manufacture is shown on top of packaging). Advanced Building Chemicals Limited Ltd guarantees the product for 12 months from the shipment date, when stored at a temperature below 30°C in its original, unopened packaging. Once the packaging has been opened, the product must be used as soon as possible.

## 11. SAFETY

Consult the Material Safety Data Sheet for SUPERBOND Thick Bodied HMA Silicone Sealant.

The information provided in this Technical Data Sheet is correct to the best of our knowledge, information and belief at the date of it's publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the content of the Technical Data Sheet.



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