

## Adhesives

### Pure Acrylics (PA)

Can offer the highest performance in terms of resistance to high and low temperatures, solvents, water, UV light and weathering; and long term bond strength. Because of this they tend to feel dry to the touch and require good clean surfaces and good application, and may still take 24 hours or longer to achieve their full bond strength. They will not bond well to low energy materials, but otherwise are used wherever the highest performance is required.

### Modified Acrylics (MA)

An extremely versatile and varied group of adhesives with higher tack than pure acrylics, and a corresponding reduction in resistance to extremes. They accommodate a wider range of surfaces and typically bond more quickly and easily. Some of these products have a very high technical specification; others are formulated to be very cost-effective in general purpose applications.

### Rubber/Resin (RR)

Rubber based adhesives have limited chemical, UV and environmental resistance, and limited temperature resistance. Within these limitations, however, they provide very good bonding to a wide range of materials including low energy materials.

## Adhesive performance

### Tack

Is a description of how sticky an adhesive feels, or in technical terms, how quickly it forms a bond under light pressure. It does not equate to bond strength, in fact high tack adhesives tend to have low performance.

### Adhesion

Adhesion measures the bond between the adhesive and the substrate. The figures on data sheets usually use stainless steel as the test surface for control purposes, but this may be meaningless in your application so we also perform tests to real materials.

### Shear

Shear measures the internal bond strength or cohesion of the adhesive, which is the most important factor for long-term performance. A low shear adhesive will flow like a liquid with time; a high shear adhesive behaves as a solid and will resist flow

**A high bond strength requires a good balance of shear and adhesion.**



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**Technibond**  
bonding industry together

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foam double sided tapes



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# Technibond

## Foam double sided tapes

Key products from our extensive range to suit all requirements

Product	Description	Foam thickness and colour	Adhesive	Temperature range °C	Performance													
					Shear performance	Adhesion to high energy surfaces	Adhesion to low energy surfaces	Adhesion to rough surfaces	Initial adhesion (back)	Adhesion at low temperatures	Resistance to high temperatures	Ageing	Outdoor performance	UV resistance	Plasticizer resistance	Solvent resistance		
HBA	A strong dense foam with a high coatweight of adhesive, meets many automotive specifications and is suitable for other robust applications such as metal bonding. Has our production aid film liner.	0.8mm 1.2mm Black	Pure acrylic	-40 to 125	●	●	○	◐	◐	●	●	●	●	●	●	●	●	●
HDF	The market-leading multi-purpose high shear tape, having a strong but flexible foam and the highest performance pure acrylic adhesive. Compatible with acrylic and polycarbonate. Suitable for signs, Georgian bars, PVC door glazing. Has our production aid film liner.	1mm 2mm Black White	Pure acrylic	-40 to 100	●	●	○	○	◐	◐	◐	●	●	●	●	●	●	●
HTA	High Tack Acrylic on strong, flexible foam for difficult surfaces and conditions, including lower surface energies and cool temperatures. Used for commercial vehicle roof bonding, PVC door glazing. Film liner optional.	0.5mm 1mm, 2mm 3mm Black White	Modified acrylic	-40 to 80	⊗	●	◐	◐	●	●	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
HPA	General purpose quality acrylic with well balanced performance for PVC trunking, glazing applications, plastic bonding. Film liner optional.	1mm 1.6mm Black White	Modified acrylic	-40 to 80	⊗	●	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
HSHT	A versatile high shear rubber adhesive suitable for most indoor applications such as cable clips, mirror mounting (tested by FIRA), hooks and dispensers.	0.8mm Black/White 1mm 1.6mm 3.2mm White	Rubber	-40 to 60	⊗	●	●	⊗	●	⊗	◐	⊗	◐	◐	○	○	○	○
PU400	A high performance product using a strong, PU foam for improved high temperature performance and flexibility. Used for automotive badges, wheel balancing weights.	0.8mm Black PU	Modified acrylic	-40 to 150	⊗	●	⊗	⊗	◐	◐	●	●	●	●	●	●	●	●

Performance key

- Poor
- ◐ Medium
- ⊗ Good
- Very Good
- Excellent



### Surface energy

The chemical nature of the surface; its attractiveness or ease with which it can be wetted by an adhesive. Also known as **Surface Tension**.

### High

Surface energy materials: glass, metals, paper and wood. Good results with all adhesive types; maximum bonds.

### Medium

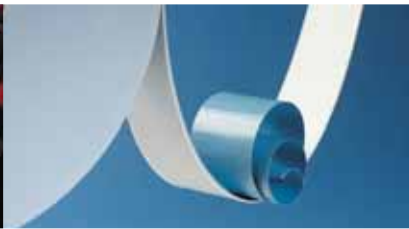
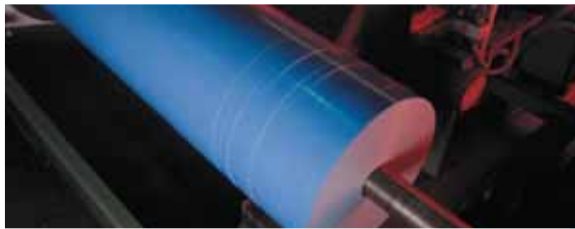
Surface energy materials: acrylic, nylon, polyester, polycarbonate, PVC and most paints. Generally good results but pure acrylics may not give full bond.

### Low

Surface energy materials: polyethylene, polystyrene, polypropylene and some powder coated paints. Difficult, pure acrylics will not bond well, modified acrylics may not give full bond.

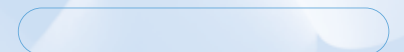
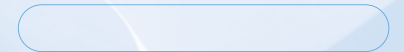
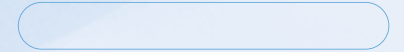
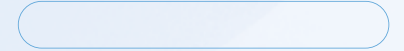
### Very Low

Surface energy materials: PTFE and silicone rubber. Acrylics and rubbers will not bond, requires silicone adhesive.



A low energy surface repels liquids, so an adhesive will not easily wet out.

## Samples



Full product data sheets available on request. Contact us today on:

**01628 642800** or visit [www.technibond.co.uk](http://www.technibond.co.uk)