Scott Bader bonding pastes are used in a wide range of applications, in a variety of markets. The key features and benefits to customers are:

- Range of densities
- Range of working times
- Colour change
- Low shrinkage
- Ease of application

Scott Bader has formulated a wide range of bonding pastes over the last 40 years to meet the demands of our customers’ varied applications. The use of a variety of chemistries including our unique urethane acrylates has created a range of bonding pastes which are unique to the market. Our bonding pastes have been granted numerous approvals from design authorities around the world and we are a trusted partner for our customers.

The tailored properties of Scott Bader’s bonding pastes have allowed our customers to maximise the performance of their structures in a cost effective manner. This has challenged the conventional thinking on GRP design, while opening up many opportunities for our customers.

Scott Bader bonding pastes are now used in a wide range of demanding applications across the marine, transport, wind, as well as building and construction sectors within the FRP industry.

Princess Yachts International (right) and the Forbes Group chemical tank (inset right) all use Bonding Paste products for demanding structural bonding applications.
Chemistry and Bonding

Marine
from kayaks to super yachts

Land & transportation
buses, coaches, cars, trains and trucks

Building & construction
doors, windows and cladding

Wind energy
blades, housing and nacelles

Tanks & pipes
storage tanks, joining of GRP pipes

Agricultural vehicles
tractors, diggers, off-road and combine harvesters

Bonding Pastes
Dispensing Equipment

- Pails and drums can be dispensed using an automated 50:1 dispensing machine
- Scott Bader technical support can provide advice on appropriate dispensing equipment and catalyst usage
Our Bonding Pastes

General Purpose Bonding Pastes
Materials suitable for non-structural GRP applications. The extensive range includes both orthophthalic and isophthalic bonding pastes with a variety of features, ensuring customers can find the right material for their application.

Fast Cure Bonding Pastes
Materials suitable for non-structural GRP applications that cure very rapidly for either repair or fast assembly applications.

Low Density Bonding Pastes/ Core Bonder
Used to bond polyester laminates and to also bond polyester laminates to balsa, PVC and PU core materials in sandwich structures.

Fibre Filled Bonding Pastes
Bonding pastes containing short glass fibres to maximise bonding strength and provide excellent gap filling/bridging properties.

High Performance Bonding Pastes
These materials are formulated with the addition of unique Scott Bader urethane acrylate polymers, providing improved fatigue resistance and bonding strengths, particularly when compared to general purpose bonding pastes. These materials can be used for some structural applications.

Fairing Compounds
Bonding pastes which are smooth, fast setting and easily sandable. They are used for smoothing out rough fibreglass surfaces.
<table>
<thead>
<tr>
<th>Category</th>
<th>Name</th>
<th>Description</th>
<th><strong>Working Time (mins)</strong></th>
<th>Colour Change</th>
<th>Tensile Elongation (%)</th>
<th><strong>Lap Shear (MPa)</strong></th>
<th>Specific Gravity (g/ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Purpose</td>
<td>B39W</td>
<td>Pumpable polyester-based bonding paste with gap filling properties</td>
<td>55</td>
<td>None (Grey)</td>
<td>1</td>
<td>4</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>90-82PA</td>
<td>General purpose orthophthalic bonding paste</td>
<td>12</td>
<td>Blue to White</td>
<td>2</td>
<td>5**</td>
<td>1.35</td>
</tr>
<tr>
<td>High Performance</td>
<td>621CC 4S</td>
<td>Urethane acrylate/ isophthalic polyester bonding paste</td>
<td>25</td>
<td>Blue to Grey</td>
<td>3</td>
<td>10</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td>621CC 8S</td>
<td>Urethane acrylate/ isophthalic polyester bonding paste</td>
<td>50</td>
<td>Blue to Grey</td>
<td>3</td>
<td>10</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td>630PA</td>
<td>Vinyl ester bonding paste</td>
<td>40</td>
<td>None (Brown)</td>
<td>3</td>
<td>10</td>
<td>1.10</td>
</tr>
<tr>
<td>Fast Cure</td>
<td>90-78PA</td>
<td>Fast cure orthophthalic bonding paste</td>
<td>8</td>
<td>None (White)</td>
<td>1</td>
<td>5**</td>
<td>1.30</td>
</tr>
<tr>
<td>Light Weight</td>
<td>90-84PA</td>
<td>Lightweight orthophthalic bonding paste with low exotherm</td>
<td>30</td>
<td>Blue to Cream</td>
<td>6</td>
<td>4</td>
<td>0.60</td>
</tr>
<tr>
<td>Fibre Filled</td>
<td>90-80PA</td>
<td>Polyester bonding paste with short fibres</td>
<td>12</td>
<td>Blue to Grey</td>
<td>2</td>
<td>10</td>
<td>1.25</td>
</tr>
<tr>
<td>Core-Bond</td>
<td>B72R</td>
<td>Lightweight, polyester-based core adhesive for foams and balsa</td>
<td>55</td>
<td>Blue to White</td>
<td>2</td>
<td>5**</td>
<td>0.70</td>
</tr>
<tr>
<td>Fairing Compound</td>
<td>F26R</td>
<td>Fast setting polyester-based fairing compound with good sanding properties</td>
<td>3</td>
<td>None (Light Pink)</td>
<td>1</td>
<td>2</td>
<td>0.70</td>
</tr>
</tbody>
</table>

* 1-2% Butanox® M-50 @25°C Refer to TDS for specific catalyst levels
** Values are based on substrate failure
Bonding Paste Applications

Bonding pastes are designed specifically for applications requiring a high performance adhesive. The range has been carefully formulated to ensure ease of application, while retaining exceptional handling properties.

Case Study

BP 621CC has good handling properties and no sagging on vertical surfaces.

“Our own tests with 30mm thick layers gave very little shrinkage and low exotherm (measured at 65°C). Both the bonding strength and the non-shrinkage properties are big advantages to us.”

Senior Engineer at Nimbus, Scandinavia
Case Study

LaserPerformance Europe manufactures small Olympic sailboat using Scott Bader range of products

About LaserPerformance
LaserPerformance is a global lifestyle brand and the world’s largest manufacturer of small sailboats. LaserPerformance proudly manufactures many iconic sailboats including: Laser, Sunfish, Laser Pico, Laser Bahia, Bug, Z420, and more. As a lifestyle brand, it distributes water sports related products and sailboats which have recently been used at the Rio 2016 Olympics.

Scott Bader Product Application
- Poly-Bond® B37 W, Poly-Bond® B55 DMC and Core-Bond® B72 R are vital components in the core bonding and mast mounting processes
- Scott Bader Asia now supplies LaserPerformance with B39 LDS and Crestabond® M1-60HV

Benefits/ Advantages
- Technology developed and fully supported by Scott Bader
- Excellent customer service
- Improved stiffness
- Cost efficiencies compared to similar competitor resins
- High quality products
- Over 60 years’ of technical expertise
Scott Bader Commonwealth Ltd - A common trusteeship company

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