



## PRESS RELEASE

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## Egypt Pavilion Meets China World Expo Fire Regulations Using Scott Bader's ATH filled Crestapol<sup>®</sup> 1212 resin and Crystic<sup>®</sup> LS30 spray gelcoat laminate system

The Egypt pavilion currently on display at the China World Expo in Shanghai covers 500 sq. meters and took three months to complete. It was constructed by E-Grow, a local company commissioned to provide the pavilion. The futuristic design of the Egypt pavilion was created by the renowned modern architect, Zaha Hadid. E-Grow opted to make the more complex exterior and interior curved and rounded sections of the highly contemporary design in fire retardant GRP. The parts were made by hand lay–up using Scott Bader's Crestapol® 1212 resin and pigmented Crystic® LS30PA ISO/NPG gelcoat, supplied by Scott Bader Asia Pacific from their Shanghai distribution operation, which serves China and other parts of Asia.

The pavilion interior is divided into two parts with a GRP arch through which visitors pass. Exhibited items include valuable antiquities, films and pictures showing Egypt's long history and rich culture. To ensure that the China Expo building fire regulations for all exterior and interior GRP parts were met to protect both visitors and the valuable artifacts, E–Grow specified the laminate construction in aluminium trihydrate (ATH) filled Crestapol® 1212 high performance urethane acrylate resin. A key advantage of using Crestapol 1212 was that the same resin could be used throughout the construction. Crestapol 1212 resin can be loaded up to 170phr of ATH to meet the most stringent fire, smoke and toxic interior test standards such as Epiradiateur NFF 16-101, NFP 92-501, M1, F0, yet still handles well in production; only 100 phr of ATH filler was needed for the exterior GRP sections. The mechanical properties of Crestapol® 1212 have the added benefit of enabling lighter moulded parts with a thinner cross section to be produced, which helped reduce the overall costs of the pavilion structure and its assembly.

Crystic<sup>®</sup> LS30PA pigmented spray gelcoat was selected as it is a UV stabilized gelcoat, designed for prolonged exterior use in demanding building and marine applications, so will maintain its gloss and colour for the six month duration of the China World Expo.

Other converters using Crestapol 1212 resin, particularly if made by closed mould or pultrusion, are also able to make major production cost savings; reducing cycle times by up to 20%, avoiding the need for post curing and reducing scrap levels, while still delivering enhanced mechanical properties and the highest fire, smoke and toxic fume (FST) fire resistance performance needed for building and land transport applications.

For information about Crestapol range visit the <a href="www.crestapol.com">www.crestapol.com</a> micro website. Details about the full range of resins, gelcoats, bonding pastes and adhesives available from Scott Bader are available on their main website <a href="www.scottbader.com">www.scottbader.com</a>.



Curved sections of the Egypt pavilion at the China World Expo in Shanghai were made from a GRP laminate using heavily ATH filled Crestapol 1212 resin with Crystic LS30 ISO/NPG spray gelcoat, which met the stringent building fire regulations.

## **About Scott Bader**

Scott Bader was established in 1921. Today it is a £180 million multinational chemical company, employing 560 people worldwide. It is a common trusteeship company, having no external shareholders, with a strong commitment to support its customers, workforce and the environment.

Scott Bader's headquarters is based in the UK where they have purpose-built, state-of-the-art technical facilities that provide R & D as well as complete evaluation, testing and application support. They have manufacturing facilities in the UK, France, Croatia, The Middle East and South Africa. For further information regarding Scott Bader, please call +44 (0)1933 663100, visit <a href="www.scottbader.com">www.scottbader.com</a> or e-mail info@scottbader.com.