

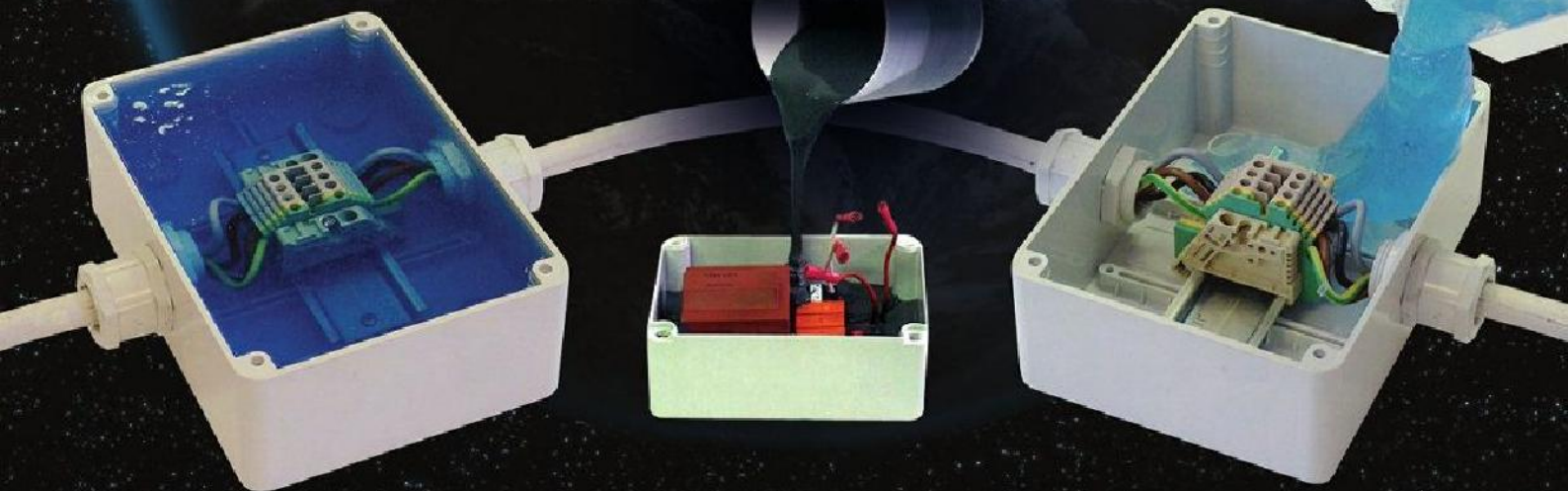
ELECTRICAL

WHOLESALE

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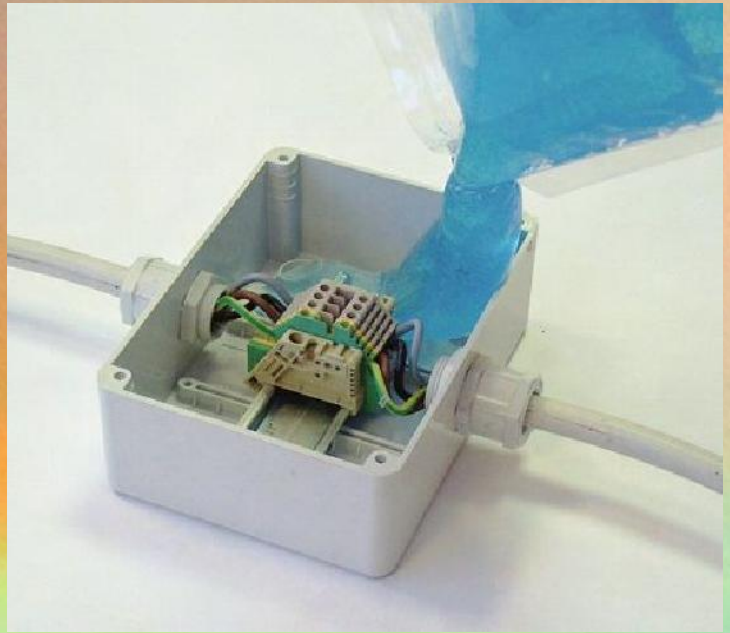
A world of
**innovative
products**
for professional electricians



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New silicon compounds beat the legislation change



By Don Lucas, Managing Director of G.H.Lucas and Company Limited

For many years the only solution to potting components and jointing cables to prevent water ingress has been based on two part epoxy resin solutions. For the Electrical Wholesaler this has always brought problems of redundant stock because of limited shelf life and the storage and disposal of the epoxy resin compounds that have always been classified as Hazardous.

The mixing and pouring of the epoxy resin also requires protective clothing and the inhalation of the fumes caused by the exothermic reaction of the two components crosslinking can have harmful consequences, and indeed epoxy resin mixes containing MDI have recently been re-classified as 'likely to cause cancer' and the packaging must now be marked accordingly.

The Electrical Wholesaler has also been forced to treat these products as commodities with the commensurate loss of margin as prices are constantly forced downward. For these reasons the sale of epoxy resin products like cable joints has become very dull and uninteresting.

Now, new silicon technology has created products that are not only completely safe in use and meet all the EU health and safety directives including COSHH, RoSH, WEEE and REACH but also have significant electrical and

mechanical properties that far exceed the properties of epoxy resin compounds in general.

The advantages for the Electrical Wholesaler are opportunities to approach new markets with products that are completely safe, truly innovative and comply with all Health and Safety regulations, which we cannot ignore with the growing pressure and insistence on compliance. Indeed some global companies with household names have committed themselves to replacing Epoxy

Resin as an immediate priority.

Both Raytech Magic Gel and Magic Rubber create joints and enclosures with an IP rating in excess of IP68; making a low cost IP44 enclosure a very cost effective solution compared to their empty IP67 counterparts. Submersion of Magic Gel and Magic Rubber filled joints and enclosures will actually improve the IP rating with depth of submersion while complying with the European Union standard for cable joints, EN 50393.

Electrical Wholesalers with customers exporting finished products encapsulated with either Magic Gel or Magic Rubber are safe in the knowledge that they are supplying a product that is not only compliant with Health and Safety issues but also meets European Union jointing standards.

Both Raytech's Magic Gel and Magic Rubber also enjoy a significantly higher dielectric strength in excess of 23kV/mm, and a wide working temperature range of -60°C to 180°C. This allows for potting and jointing at temperatures below freezing, a characteristic that is not possible with Epoxy resins and other compounds on the market masquerading as a Gel product when they are actually a cast resin.

Crosslinking times are much shorter as well, about 10 minutes at 23°C and the joint or enclosure can be energised immediately. Both compounds can also be re-entered, even after long periods of time. So if any enclosure or joint needs to be altered the compound can be removed without



damaging the enclosure components and re-filled with new compound that bonds to the original compound.

New product evolution

New products provide a wide variety of solutions for potting, encapsulation and repair using either Silicon Gel or Silicon Rubber products. From the core technology, individual product development has created different types of cable joints, both traditional or pre filled with gel that snap together for instantaneous jointing and energising without the need to wait for the long periods of time that it takes for epoxy resins to completely cure. These traditional and pre filled joints are suitable for use with any type of cable, be it armoured or unarmoured, multicore, braided or other type. Indeed the low viscosity of Magic Gel enables the complete permeation of multi core telecommunication cable pairs ensuring the integrity of the ingress protection.

Following the huge success of the launch of Raytech's Magic Gel in Europe, a complete range of enclosures has been introduced to give installers everything in one kit that is needed to join cables and pot components. These Magic Box kits are so competitively priced that the enclosure and cable glands are effectively free. The cost representing only the gel component and provide a great profit opportunity for Electrical Wholesalers to provide solutions for problems of not only water ingress but also condensation, dust and corrosion. Filling of the enclosures can be carried out in either a horizontal or vertical plane in which case the enclosure is filled through a knock out, then capped with a snap in cover.

Such is the versatility of these two products that they have been used in a greater range of applications

than just the obvious outdoor lighting market. The growth in LED lighting has brought problems of water ingress, and of course pool lighting where there is permanent submersion of light fittings. These products have been used for junction boxes for pumps, street lighting, and areas where fire retardance is a necessity. Rubber coating of printed circuit boards to protect against vibration and component damage. Railway, tram and motorway projects have all used Magic products cost effectively as well as tunnels and marine applications and the fast expanding solar panel market where optically clear gel will repair and seal damaged panels and protect the all important solar panel connections.

New product development is a very important factor when considering stocking a new product range. By promoting Magic Gel and all the associated products in Raytech's Magic Line you will have access to a family of products that is unrivalled in performance and variety, creating new opportunities for your sales personnel.

New products

For 2011, many new products have been added to the already comprehensive range. New gel formulations that vary in colour and properties and a new, softer rubber compound provide more solutions to your customers. A new range of pre-filled Gel joints that are supplied complete with purpose made five pole connectors and comply with EN50393 are

particularly exciting, because they can be used as branch joints as well as through joints.

Apart from the increased product range, now in new and very attractive Euroslot packaging, comprehensive 200

page catalogues are available for you, your sales personnel and your customers as well as POS leaflet dispensers, wall



posters and a new product display complete with the already well known and market leading MagicGel.

The additional Ray RTV Rubber, Sky Plast high temperature moulding putty and different colours of Ray Gel, a gasket making kit and a small number of the incredible new King Joints make up the complete display.

This new display is available at a very low introductory price effectively giving away the newly launched products for only the cost of the Gel in the display, call 0845 437 4451 for details.

As usual, G.H.Lucas and Company Limited will continue to create product awareness through the trade press and exhibitions and we will be happy to refer enquiries to product stockists as they arise.

All product information can also be found on our new website www.ghlucas.com.

The future

The success of Magic products has demonstrated a proven and expanding market for the new technology despite the slight price premium compared to traditional resin. There is no doubt that the superior specification has not deterred sales growth even in recessionary times.

In today's rapidly changing and competitive environment it is no longer acceptable to continue with a primary focus on cost alone. Innovation is the key to growth, higher sales turnover and improved margins. Make this a new route to profit from new technology.

G.H.Lucas and Company Limited
P.O.Box 754
Altrincham
Cheshire
WA15 5DX

Tel 0845 437 4451
Fax 0845 437 4452
www.ghlucas.com

