

## Case Study

### Slimplug made of Pocan® S 7926

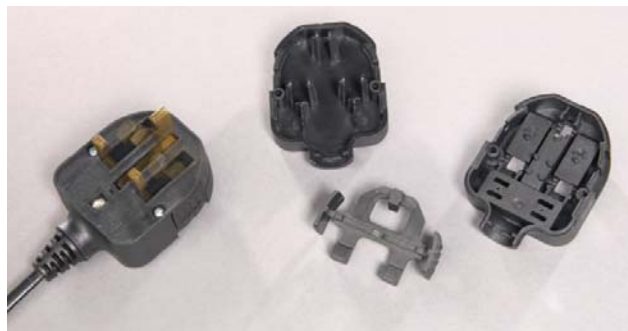


Figure 1 Slimplug

Ridings limited are a dynamic, young technology company. They are the inventor of the 'Slim Plug', an innovative product aimed at the laptop user. It is designed to save space when carrying a laptop and to reduce damage caused by exposed plug pins.

The Slimplug is a power lead with a revolutionary folding pin plug. A notebook's power supply is annoying to carry around, especially the three-pin square plug. To resolve this, the Slimplug's three prongs retract safely out of the way. It's easy to operate; just grab the two switches on the side, and extract or retract the prongs. In plug mode, it feels as tough as a standard plug. The Slimplug is slightly thicker than a standard plug.

It is a space saving device which will fit a number of electrical items that use a figure of eight connector. This makes it suitable for most laptops and camcorders, as well as PS2, Xbox and all sorts of other devices.

**Material:** Pocan® S 7926

**Molder:** Ridings Ltd., UK

**Industry:** Electrical/Electronics

Ridings Ltd. decided for Pocan® S 7926 as raw material for the Slimplug.

Due to the fact that UL requirements need to be fulfilled when plastic gets in contact with conducting parts they choose a flame retardant Pocan grade. Pocan® S 7926 is an impact modified grade that reaches a UL94V-0 classification at a thickness of 1.6 mm and a GWIT (glow wire ignition temperature) of 700 °C.

Further properties are:

- high toughness and high strain values in conjunction with good stiffness
- high impact strength
- heat and aging resistance



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#### Typical Properties

Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

#### Flammability

Flammability results are based on small-scale laboratory tests for purposes of relative comparison and are not intended to reflect the hazards presented by this or any other material under actual fire conditions.

#### Health and Safety

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling LANXESS products mentioned in this publication. Before working with these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets (MSDS) and product labels. Consult your LANXESS Corporation representative or contact the Product Safety and Regulatory Affairs Department at LANXESS. For materials that are not LANXESS products, appropriate industrial hygiene and other safety precautions recommended by their manufacturer(s) must be followed.

#### Regulatory Compliance

Some of the end uses of the products described in this brochure must comply with applicable regulations, such as the FDA, NSF, USDA and CPSC. If you have any questions on the regulatory status of any LANXESS engineering thermoplastic, consult your LANXESS Corporation representative or contact the LANXESS Regulatory Affairs Manager.

#### Regrind

Where end-use requirements permit, regrind may be used with virgin material in quantities specified in individual product information bulletins, provided that the material is kept free of contamination and is properly dried (see maximum permissible quantities and drying conditions in product information bulletins). Any regrind used must be generated from properly molded/extruded parts, sprues, runners, trimmings and/or film. All regrind used must be clean, uncontaminated, and thoroughly blended with virgin resin prior to drying and processing. Under no circumstances should degraded, discolored, or contaminated material be used for regrind. Materials of this type should be discarded. Improperly mixed and/or dried regrind may diminish the desired properties of a particular LANXESS product. It is critical that you test finished parts produced with any amount of regrind to ensure that your end-use performance requirements are fully met. Regulatory or testing organizations (e.g., UL) may have specific requirements limiting the allowable amount of regrind. Because third party regrind generally does not have a traceable heat history or offer any assurance that proper temperatures, conditions, and/or materials were used in processing, extreme caution must be exercised in buying and using regrind from third parties. The use of regrind material should be avoided entirely in those applications where resin properties equivalent to virgin material are required, including but not limited to color quality, impact strength, resin purity, and/or load-bearing performance.

#### Color and visual effects

Type and quantity of pigments or additives used to obtain certain colors and special visual effects can affect mechanical properties.

#### Note:

The information contained in this publication is current as of October, 2008. Please contact LANXESS Corporation to determine if this publication has been revised.

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