Technical Information

Semi-Crystalline Products



Case Study

SIM card holder made from Pocan® B 4235



Figure 1 SIM card holder

Molex is a leading supplier of connection systems. With a portfolio of over 100,000 different products, it is one of the world's largest solution providers in the electronics industry. The key sectors where it operates include telecommunications, electrical components for automotive, industrial and household device applications and home entertainment. Since it was founded in 1938, Molex has continually expanded and is now a global company. This results in extremely high demands in terms of quality and the global availability of the materials used.

Items offered by Molex for use with cell phones include keypads, memory sticks and SIM card holders. SIM (Subscriber Identification Module) cards are security features and are also used to record

Material: Pocan[®] B 4235

Manufacturer: Molex

Industry: Electrical/electronics

charges and store numbers in cell phones. Although SIM cards have a standardized design and thus always remain the same, the fact that new cell phone designs are constantly appearing means that a great deal of flexibility is required when it comes to the design of card holders.

Molex provides a wide range of these holders using a plastic made by LANXESS – Pocan[®] B 4235.

This glass fiber-reinforced, flame-retardant PBT has an impressive combination of mechanical, rheological, electrical and flame-retardant properties. The product's wide processing window also allows non-stop production, even with different molded part geometries.



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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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