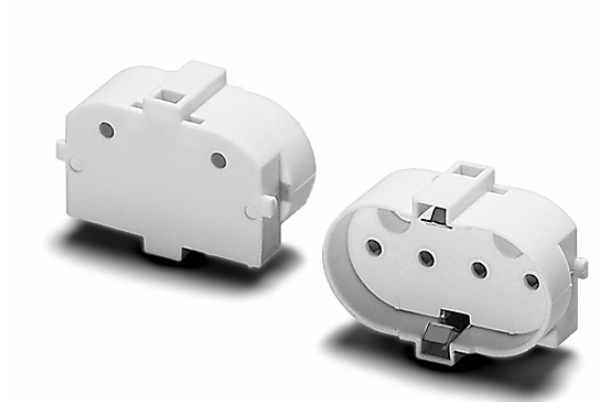


Case Study

Pocan® DP BFN 4230 for lamp holders complying with the domestic appliance standard



Material: Flame-retardant Pocan®

Molder: ebm-papst, Germany

Industry: Electrical/Electronics

[Vossloh-Schwabe](#) is one of the world's leading manufacturers of electrical engineering and electronic components for lighting engineering. For many decades, the company has supplied a comprehensive range of high-quality, innovative products for use in a wide range of applications. These include electronic and electromagnetic ballasts, transformers, ignition devices, capacitors, lamp holders, and other lighting components, as well as LEDs and LED assemblies, wiring robots and test modules.

As a supplier of all-in product systems for the full range of state-of-the-art lighting technologies, Vossloh-Schwabe has now developed a solution for lamp holders that meets the requirements of the tightened IEC/EN 60335-1 domestic appliance standard. The extended IEC/EN 60335-1 domestic appliance standard covers dangers of an electrical, mechanical and thermal nature, as well as the fire and radiation hazards associated with electrical appliances for domestic and similar use. Plastics used

as supports for live components in unsupervised domestic appliances with a current intensity in excess of 0.2 amps are required to have a high glow wire ignition temperature (GWIT).

With Pocan® DP BFN 4230, LANXESS Deutschland GmbH supplies a flame retardant PBT that meets the requirement for a GWIT of at least 775 °C. This material property is also verified on the UL Yellow Card and the VDE certificate for electrical insulating materials. The material is additionally free from halogens and thus meets the requirements of a large number of customers.

ebm-papst has therefore opted for the Pocan® product group from LANXESS as its plastic of choice. The extensive range of flame-retardant Pocan® grades fulfils the different requirements imposed by the varied fields of use, which range from automotive to household electronics.



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The manner in which you use and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety and environmental standpoint. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale. All information and technical assistance is given without warranty or guarantee, and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

Developmental Product

Any product designated as a developmental product is not considered part of the LANXESS Corporation line of standard commercial products. Complete commercialization and continued supply are not assured. The purchaser/user agrees that LANXESS Corporation reserves the right to discontinue this product without prior notice.

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.

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.

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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.

