

Vacuum Cleaner Components in Desmopan®

In the interests of the customer

Vacuum cleaners are required to be robust and offer a long service life. Extreme property levels are thus required in a whole series of their components:

- high abrasion resistance and, at the same time,
- high elasticity

This applies to components such as the protective strips around the middle, the casters and the brush head.

On the latest vacuum cleaner models from Miele (the S 400 series of models), these parts are made of Desmopan, a thermoplastic polyurethane (TPU) from Bayer. The decisive feature of this material is its

- excellent abrasion resistance, which constitutes just one feature of a nicely-rounded property profile

In the interests of the environment

As a result of the growing ecological awareness, one of the requirements placed on the material has inevitably moved into the foreground:

- problem-free disposal

Moulded parts in Desmopan can be recycled, dumped or incinerated with energy recovery. This too was one of the reasons why Miele selected Desmopan rather than a conventional thermoplastic.

In addition, Desmopan from Bayer is very easy to process. The Möller company of Bielefeld, for example, is able to produce protective strips in Desmopan KU 2-8655 with the same level of efficiency as in PVC.

Bayer additionally provided the company with considerable support in product development and mould design by making available Moldflow studies that were relevant to the problem on hand.

Bayer's solution to the problem

In this particular application, the selection of Bayer's thermoplastic polyurethane, Desmopan, has provided the company with a material to meet both present and future demands:

- reliable serviceability in new components
- easy disposability of used components



Miele vacuum cleaner, S 400 series of models

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