

# Desmopan 2590A GMP

Extrusion- and injection molding grade; does not contain any anti-hydrolysis agent; This product is manufactured under Good Manufacturing Practice (GMP defined in Regulation (EC) No. 2023/2006) and is therefore limited suitability for use with food contact. Please refer our separate certificate at http://www.tpu.covestro.com/en/Library/Certificates/Food-Contact.aspx.; Application; Blown films

### ISO Shortname

I

| Property                                | Test Condition | Unit            | Standard                   | typical<br>Value<br>drying ar<br>according to sp | nnealed | -<br>IS  |
|---|----------------|-----------------|----------------------------|--|---------|----------|
| echanical properties (23 °C/50 % r. h.) |                |                 |                            | ·  |         | ,        |
| shore hardness A                        | 15             | -               | DIN ISO 7619-1             |  | 92      | <u> </u> |
| Ultimate tensile strength               | 200 mm/min     | MPa             | DIN 53504                  |  | 48,9    |          |
| Strain at break                         | 200 mm/min     | %               | DIN 53504                  |  | 442,2   |          |
| Stress at 10 % strain                   | 200 mm/min     | MPa             | DIN 53504                  |  | 4,3     |          |
| Stress at 50 % strain                   | 200 mm/min     | MPa             | DIN 53504                  |  | 9,4     | 1        |
| Stress at 100 % strain                  | 200 mm/min     | MPa             | DIN 53504                  |  | 11,9    |          |
| Stress at 300 % strain                  | 200 mm/min     | MPa             | DIN 53504                  |  | 30,1    |          |
| Compression set                         | 24 h; 70 °C    | %               | DIN ISO 815-1, Method<br>A |  | 52      |          |
| Compression set                         | 72 h; 23 °C    | %               | DIN ISO 815-1              |  | 24      |          |
| Compression set                         | 24 h; 70 °C    | %               | DIN ISO 815-1, Method<br>C |  | 39      |          |
| Abrasion resistance                     |                | mm <sup>3</sup> | ISO 4649 method A          |  | 60      |          |
| Rebound resilience                      |                | %               | ISO 4662                   |  | 25      |          |
| Tear strength                           | 500 mm/min     | kN/m            | ISO 34-1                   |  | 100     |          |
| hermal properties                       |                |                 |                            |  |         |          |
| Tensile storage modulus                 | -20 °C         | MPa             | ISO 6721-1,-4              |  | 1710    |          |
| Tensile storage modulus                 | 20 °C          | MPa             | ISO 6721-1,-4              |  | 130     |          |
| Tensile storage modulus                 | 60 °C          | MPa             | ISO 6721-1,-4              |  | 57      |          |
| ther properties (23 °C)                 |                |                 |                            |  |         |          |
| Density                                 |                | kg/m³           | ISO 1183-1                 |  |         | 1205     |
| lolding conditions                      |                | 3               |                            |  |         |          |
| Injection molding-Melt temperature      |                | °C              | -                          | 210 - 230  |         |          |
| Injection molding-Mold temperature      |                | °C              | -                          |  |         | 20       |
| Extrusion-Melt temperature              |                | °C              | -                          | 190 - 210  |         |          |
| Maximum drying temperature              |                | °C              | -                          |  |         | 80       |

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

Impact properties: N = non-break, P = partial break, C = complete break



Page 1 of 2 pages



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## Disclaimer

#### Desmopan Disclaimer for Sales products

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

#### Desmopan Typical value

The shown values are typical values only. Unless explicitly agreed in written form, they do not constitute a binding material specification or warranted values. Values may be affected by the design of the mold/die, the processing conditions and coloring/pigmentation of the product. Unless specified to the contrary, the property values given have been established on standardized test specimens at room temperature.

#### Desmopan Processing note

Under the recommended processing conditions small quantities of decomposition product may be given off during processing. To preclude any risk to the health and well-being of the machine operatives, tolerance limits for the work environment must be ensured by the provision of efficient exhaust ventilation and fresh air at the workplace in accordance with the Safety Data Sheet. In order to prevent the partial decomposition of the polymer and the generation of volatile decomposition products, the prescribed processing temperatures should not be substantially exceeded.

#### Desmopan No Medical-, Food Contact- and Cosmetic Applications

This product is not designated as "Medical Grade"[i] and therefore shall not be considered a candidate for the manufacture of a medical device or of intermediate products for medical devices, which are intended under normal use to be brought into direct contact with the patient's body (e.g., skin, body fluids or tissues, including indirect contact to blood)\*. This product is also not designated for Food Contact[ii], including drinking water, or Cosmetic Applications. If the intended use of the product is for the manufacture of a medical device or of intermediate products for medical devices, for Food Contact products or Cosmetic Applications, Covestro Aktiengesellschaft (COV-PUR-CO-TPU EMEA/LA) must be contacted in advance to provide its agreement to sell such product for such purpose. Nonetheless, any determination as to whether a product is propriate for use in a medical device or intermediate products, for Food Contact products or Cosmetic Applications at the product is appropriate for use in a medical device or network of the manufacture of a medical devices, for Food Contact products or Cosmetic Applications at the product is appropriate for use in a medical device or intermediate products for Food Contact products or Cosmetic Applications at the product is appropriate for use in a medical device or intermediate products for Food Contact products or Cosmetic Applications at the product without relying upon any representations by Covestro Aktiengesellschaft (COV-PUR-CO-TPU EMEA/LA). [i] Please see the "Guidance on Use of Covestro Products in a Medical Application" document. [ii] As defined in Commission Regulation VO (EU) 1935/2004.

#### Desmopan General disclaimer

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Page 2 of 2 pages



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