Desmopan 1080A

100 grade series, ester / Shore hardness A 80 - 84 injection molding grade; free from plasticizers; hard - soft systems; Technical parts

ISO Shortname TPU-ARES

	Property	Test Condition	Unit	Standard	typical Value drying annealed - according to specifications		
Mechanical properties (23 °C/50 % r. h.)							
C	shore hardness A	1s	-	DIN ISO 7619-1		80	
	Ultimate tensile strength	200 mm/min	MPa	DIN 53504		35	
	Strain at break	200 mm/min	%	DIN 53504		750	
	Stress at 10 % strain	200 mm/min	MPa	DIN 53504		1,2	
	Stress at 100 % strain	200 mm/min	MPa	DIN 53504		4,0	
	Stress at 300 % strain	200 mm/min	MPa	DIN 53504		8	
C	Compression set	24 h; 70 °C	%	DIN ISO 815-1, Method A		36	
C	Compression set	72 h; 23 °C	%	DIN ISO 815-1		22	
C	Compression set	24 h; 70 °C	%	DIN ISO 815-1, Method C		27	
C	Abrasion resistance		mm³	ISO 4649 method A		35	
	Rebound resilience		%	ISO 4662		44	
	Tear strength	500 mm/min	kN/m	ISO 34-1		56	
Thermal properties							
	Tensile storage modulus	-20 °C	MPa	ISO 6721-1,-4		170	
	Tensile storage modulus	20 °C	MPa	ISO 6721-1,-4		34	
	Tensile storage modulus	60 °C	MPa	ISO 6721-1,-4		24	
Other properties (23 °C)							
C	Density		kg/m³	ISO 1183-1			1206
Recommended processing and drying conditions							
	Injection molding - Melt temperature		°C	-	185 - 200		
	Injection molding - Mold temperature		°C	-			20 - 40
	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

2026-02-18 11:00:00 Distributed by Mito polimeri

Desmopan 1080A

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-CAS-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 appropriate for use in a medical device or intermediate products for medical devices, for Food Contact products or Cosmetic Applications must be made solely by the purchaser of the product without relying upon any representations by Covestro Aktiengesellschaft (COV-CAS-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

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 our products, technical assistance and information 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 which are available upon request. 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 any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

Covestro AG

Business Unit Polyurethanes

Kaiser-Wilhelm-Allee 60

51373 Leverkusen

Germany

www.TPU.covestro.com

www.covestro.com

2026-02-18 11:00:00 Distributed by Mito polimeri