



# Utechllan U.1-88AP10

U(1)-P grade series, ester / Shore hardness A85 - 91

injection molding grade; high mechanical strength; better heat resistance; easy demolding

Property	Test Condition	Unit	Standard	Typical Value
<b>Mechanical properties (23 °C)</b>				
shore hardness, method A		-	ISO 868	88
Ultimate tensile strength	200 mm/min	MPa	DIN 53504	58.0
Strain at break	200 mm/min	%	DIN 53504	530
Stress at 100 % strain	200 mm/min	MPa	DIN 53504	5.8
Stress at 300 % strain	200 mm/min	MPa	DIN 53504	18.0
Abrasion resistance		mm <sup>3</sup>	ISO 4649, method B	40
Tear propagation resistance	500 mm/min	kN/m	ISO 34-1	115
Compression set	24 h; 70 °C	%	ISO 815	30.0
Compression set	72 h; 23 °C	%	ISO 815	15.1
<b>Other properties (23 °C)</b>				
Density		kg/m <sup>3</sup>	ISO 1183-1	1170
<b>Molding conditions</b>				
Injection molding-Melt temperature		°C	-	195 - 215
Injection molding-Mold temperature		°C	-	20 - 40
Maximum drying temperature		°C	-	100

## Disclaimer

### Disclaimer for Sales products

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### Disclaimer Non Medical Grade

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 Taiwan Limited 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 Taiwan Limited. [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.

### Typical values

Unless specified to the contrary, the values given are typical values which have been established on standardized test specimens at room temperature. The figures should be regarded as guide values only and not as binding material specification or warranted properties. Values can be varied to a considerable extent depending on the design of the mold/die, the processing conditions and coloring of the product.

### 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 Material 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.

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