Trade name: **SIMONA® PE 1000 AST**
Date of printing: 15.10.2025

Revision: 20.06.2017

	SIMONA® PE 1000 AST
Data sheet update	20.06.2017
Moulding compound pressed	PE,QCY,33 G 000
Pressed to moulding compound standard	DIN EN ISO 17855-1
Density, g/cm³, DIN EN ISO 1183	0.94
Tensile modulus of elasticity, MPa, DIN EN ISO 527	700
Yield stress, MPa, DIN EN ISO 527	21
Elongation at yield, % , DIN EN ISO 527	11
Data sheet applies to colour(s):	black
Impact strength, kJ/m², DIN EN ISO 179	without break
Ball indentation hardness, MPa, DIN EN ISO 2039-1	38
Shore hardness D (15 s), DIN EN ISO 868	64
Mean coefficient of linear thermal expansion, K^{-1} , ISO 11359-2	1,8 x 10^{-4}
Vicat B, °C , DIN EN ISO 306	84
Molar mass	5.000.000
Surface resistivity, Ohm , DIN EN 61340	<10^{9}
Temperature range, °C	-260 to +80
Fire behaviour DIN 4102	DIN 4102 B2 normal flammability (self-assessment without test certificate)
Food compliance FDA	yes
Physiological safety in accordance with BfR (German Federal Institute for risk valuation)	yes

All specifications are deemed to be approximate values in respect of the specific material and may vary depending on the processing methods used. In general, data specified applies to average values measured on extruded sheets with a thickness of 4 mm. In the case of sheets manufactured by means of pressing, testing is generally performed on sheets with a thickness of 20 mm. Deviations from the values specified are possible if the sheets in this thickness are not available. In the case of backed sheets, all technical specifications relate to the non-backed base sheets. Information presented herein is not necessarily applicable to other products (e.g. pipes, solid rods) of the same material or products that have undergone downstream processing. Suitability of materials for a specific field of application must be assessed

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by the party responsible for processing or the end-user. All technical specifications presented herein are designed merely to provide assistance in terms of project planning. They do not constitute a guarantee of specific properties or qualities. All technical specifications and temperature ranges were determined in short-term tests and therefore cannot be used for design work for permanent, long-term use that requires long-term properties. For further information, please contact our Technical Service Centre at tsc@simona.de.