Product datasheet DURASOFT® pd

1 Description of the product / intended use / company

Trade name:	**DURASOFT® pd**
Intended use:	Thermoplastic foils for the manufacture of appliances and splints for dental and orthodontic treatments.
Manufacturer / Supplier:	Scheu Dental GmbH Am Burgberg 20 58642 Iserlohn Germany Tel. 0049 2374 9288-0

2 Composition / information on ingredients

Chemical characterization

CAS-Number:	75701-44-9 (TPU) / 25640-14-6 (PETG)
Designation:	Thermoplastic polyurethan/ Polyethylene terephthalate-glycol (TPU/PETG)

3 Handling and storage

Handling

Information for safe handling:	When using do not eat, drink or smoke. Provide suction extractors if dust is formed.

Storage

Storage conditions:	Store dry and dark at 5 - 35 °C

4 Physical, chemical, mechanical and biological properties

4.1 General properties

Properties	Guideline	Value (TPU)	Value (PETG)
Form	-	Solid	
Colour	-	Transparent	
Odour	-	Odourless	
Density	ISO 1183	1,12 g/cm³	1,27 g/cm³
Water absorption after 24 h at 23°C	ISO 62	-	0,2 %

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4.2 Mechanical properties

Properties	Guideline	Value (TPU)	Value (PETG)
Tensile strength	ISO 53504/ ISO 527	39 MPa	53 MPa
Tensile modulus	ISO 527	-	2200 MPa
Elongation at break	ISO 53504/ ISO 527	600 %	40 %
Rockwell hardness	ASTM D785	-	115
Shore hardness A	ISO 7619	86	-

4.3 Thermal properties

Properties	Guideline	Value (TPU)	Value (PETG)
Vicat softening temperature	ASTM D1525	-	83 °C

4.4 Biological properties / Biocompatibility

A biological evaluation was carried out for the material in accordance with DIN EN ISO 10993-1. It meets the requirements regarding biocompatibility for medical devices.

5 Stability and reactivity

Thermal decomposition / Conditions to avoid:
No decomposition by intended use.

6 Disposal

The material can be recycled after separation or deposed of like commercial or household waste.

The aforementioned data are given most conscientiously but without any obligation. Any processing details are provided merely for guidance: it is the user's responsibility to check the suitability of the product for the intended application.