

Product datasheet DURASOFT® pd

1 Identification of the substance / preparation / company

Product details

Trade name: DURASOFT® pd

Use of the substance / preparation: Manufacture of dental deep drawing splints

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 (PET-G)

Designation: Thermoplastic polyurethane (TPU) / Polyethylenterephthalat-Glycol Copolyester (PET-G)

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 max. 30°C

4 Physical, chemical, mechanical and biological properties

4.1 General properties

Properties	Guideline	Value (TPU)	Value (PET-G)
Form	-	Solid	Solid
Colour	-	Transparent or blue	Transparent
Odour	-	Odourless	Odourless
Density	ISO 1183	1,12 g/cm ³	1,27 g/cm ³
Water absorption after 24 h at 23°C	ISO 62 Methode 1	0,3 %	0,2 %

Revision: 2 15/18 Ersetzt: 1 29/17	Hint: Valid from LOT 1714A	Seite 1 von 3
---------------------------------------	-----------------------------------	---------------

Product datasheet DURASOFT® pd

4.2 Mechanical properties

Properties	Guideline	Value (TPU)	Value (PET-G)
Tensile strength	DIN 53504 / ISO 527	39 MPa	53 MPa
Flectional strength	ISO 178	-	69 MPa
Charpy Impact strength 23°C	ISO 179 gekerbt	Kein Bruch	10 KJ/m ²
Izod Impact strength 23°C	ISO 180 gekerbt	Kein Bruch	12 kJ/m ²
Yield strain	ISO 527	-	5 %
Yield stress (at 100%)	DIN 53504	7 MPa	-
Elongation at tear	DIN 53504 / ISO 527	600 %	40 %
E-modulus	ISO 527	-	2200 MPa
Hardness Shore A	ISO 868	86	-
Hardness Shore D	ISO 868	35	78
Rockwell Hardness	D 785 R Scale	-	115

4.3 Thermal properties

Vicat softening point	ISO 306	-	~ 80°C
Thermoform resistance	ISO 75 Method A	-	68°C
	ISO 75 Method B	-	72°C
Continuous stress temperature	ISO 75 Method A	-	68°C
	ISO 75 Method B	-	72°C

4.4 Biological properties / Biocompatibility

The material has been tested on biocompatibility according to DIN EN ISO 10993. It meets the requirements regarding biological compatibility for medical products / 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 deposited off like commercial or household waste.

Revision: 2 15/18 Ersetzt: 1 29/17	Hint: Valid from LOT 1714A	Seite 2 von 3
---------------------------------------	-----------------------------------	---------------

Product datasheet DURASOFT® pd



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.

Revision: 2 15/18 Ersetzt: 1 29/17	Hint: Valid from LOT 1714A	Seite 3 von 3
---------------------------------------	-----------------------------------	---------------

08,14,A₁
— for internal traceability
— calendar year
— calendar week