

Product datasheet DURASOFT®

1 Identification of the substance / preparation / company

Product details

Trade name: DURASOFT®

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. 20°C

4 Physical, chemical, mechanical and biological properties

4.1 General properties

Properties	Guideline	Value (TPU)	Value (PET-G)
Form	-	Solid	Solid
Colour	-	Transparent	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 %

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4.2 Mechanical properties

Properties	Guideline	Value (TPU)	Value (PET-G)
Tensile strength	DIN 53504 / ISO 527	39 MPa	53 MPa
Flexional 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

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.

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.

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