

Product datasheet DURASOFT® seal

1 Identification of the substance / preparation / company

Product details

Trade name:	DURASOFT® seal
Application of the substance / preparation:	Manufacture of dental pressure moulding 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
Designation:	Thermoplastic polyurethane (TPU)

3 Handling and storage

Handling

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

Storage conditions:	Store dry and dark at max. 30°C
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4 Physical, chemical, mechanical and biological properties

4.1 General properties

Properties	Guideline	Value (TPU)
Form	-	Solid
Colour	-	magenta
Odour	-	Odourless
Density	ASTM D 792	1,20 g/cm ³
Water absorption after 24 h at 23°C	ASTM D 570	0,13%

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4.2 Mechanical properties

Properties	Guideline	Value (TPU)
Tensile strength at break	ISO 527-2/1A/5	69 MPa
Elongation at break	ISO 527-2/1A/5	160 %
Elongation at yield	ISO 527-2/1A/5	6%
Tensile strength at yield	ISO 527-2/1A/5	63 MPa
E-modulus	ISO 527-2/1A/1	1900 MPa
Flexural strength	ISO 178	90 MPA
Izod Impact strength +23°C	ISO 180/1A	8,0 KJ/m ²
Izod Impact strength -30°C	ISO 180/1A	5,2 KJ/m ²
Rockwell Hardness	ASTM D 785 (Skala R)	121
Hardness Shore D	ISO 868	82

4.3 Thermal properties

Vicat softening point	ISO 306 (A50)	101°C
Thermoform resistance	ISO 75 / A	75°C
	ISO 75 / B	81°C
Continuous stress temperature	-	-

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 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.