Product datasheet DURAN®

1 Description of the product / intended use / company

Trade name:	**DURAN®**
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:	25640-14-6
Designation:	Polyethylenterephthalat-Glycol (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
Form	-	Solid
Colour	-	Transparent
Odour	-	Odourless
Density	ISO 1183	1,27 g/cm^3
Water absorption after 24 h at 23°C	ASTM D570	0,1 - 0,2 %

4.2 Mechanical properties

Properties	Guideline	Value
Tensile strength	ISO 527	49 - 53 MPa
Flexural modulus	ISO 178	1900 - 2100 MPa
Flexural strength	ISO 178	67 - 69 MPa
Izod Impact Strength, Notched @ 23 °C	ISO 180	6 - 12 kJ/m²
Rockwell Hardness	ASTM D785	106 - 115

4.3 Thermal properties

Properties	Guideline	Value
Glass transition temperature	DSC	~ 80 °C
Vicat softening point	ASTM D1525	83 °C – 85 °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.