

Product datasheet Erkoloc-pro



1. Manufacturer information

Trade name:	Erkoloc-pro/ blu/ green/ pink
Intended use:	Fabrication of dental thermoforming splints
Manufacturer:	Erkodent Erich Kopp GmbH Siemensstraße 3 72285 Pfalzgrafenweiler Germany Tel.: +49 7445 8501-0

2. Intended use

Erkoloc-pro is thermoformed to fabricate intra-oral appliances such as:

Application	Thickness recommendation
Occlusal, bruxism and michigan splints	2.0 – 3.0 mm (adding) 3.0 – 5.0 mm (subtracting)
Bleaching trays	1.0 mm
Fluoride trays	1.0 mm
Stabilization splints	1.0 and 1.3 mm
Silensor-sl anti snoring device	3.0 mm
Aligners/ corrections splints	1.0 and 1.3 mm
Retainers	1.0 – 2.0 mm

The thickness recommendations are non-binding suggestions based on market observation.

3. Composition

CAS-No.:	25640-14-6	9018-04-6
Designation:	Polyethylenterephthalat (PET-G)	Thermoplastic Polyurethan (TPU)

4. Properties (all data are approximate values)

General properties:

Properties	Guideline	Value – PETG	Value – TPU
Form	-	very tough, hard	soft
Colour		clear	clear, blu, green, pink
Odour	-	inodorous	inodorous
Density	ISO 1183	1.27 g/cm ³	-
Water absorption, 24 h/ 23 °C	ISO 62/1	0.2 %	-
Water solubility	-	insoluble	insoluble

Mechanical properties:

Properties	Guideline	Value – PETG	Value – TPU
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Tensile strength	ISO 527	53 MPa	38.6 MPa
Flectional strength	ISO 178	69 MPa	-
Impact strength, 23 °C	ISO 179/1eU	no break	-
Notch impact, 23 °C	ISO 179/1eA	10 kJ/m ²	-
Yield stress	ISO 527	53 MPa	5,5 MPa
Elongation at break	ISO 527	40 %	590 %
E-modulus	ISO 527	2200 MPa	26.9 MPa
Hardness shore A/ shore D	ISO 868	-	85 Shore A
Rockwell hardness	D 785	115	-

Thermal properties:

Properties	Guideline	Value – PETG	Value – TPU
Vicat softening point	ISO 306	83 °C	80 °C
Temperature resistance, 1.80 MPa	ISO 75	68 °C	-
Glass transition temperature	ISO 11357	-	- 46 °C
Shrinkage after thermoforming	-	0.5 %	-

Biological properties:

The material has been tested for biocompatibility according to DIN EN ISO 10993-1 and does not affect the patient's biological safety.

5. General information

Storage instructions:

Keep away from sunlight. Keep dry.
Recommended storage temperature: -5 °C – 45 °C

Instructions for cleaning and maintenance:

Best results are achieved with Oxydens cleansing tablets.
Further cleaning agents: Soap, curd soap, liquid soap and dish liquid. Do not use any strongly perfumed soaps.
Not suited are: tooth-paste, mouth-wash and water that is hotter than 50 °C.
Solvent-based cleaning agents cause delamination of multi-layered splints.

Sterilisation:

A sterilization with gas and plasma (<50 °C) is possible. As a result of the thermolability the materials are not autoclavable.

To the best of our knowledge, the information in this product data sheet is correct at the time of printing. The information is not a guaranteed assurance of product properties and does not

establish any contractual legal understanding. All processing instructions are approximate values and do not release the user from the obligation to determine the suitability for the respective application.

Errors and omissions excepted.