# Product datasheet Erkodur



Revision: 3

Modification date: 15.04.21 / created 21.10.20

## 1. Manufacturer information

Trade name: Erkodur/-freeze/-A1/-A2/-A3/-0M1

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

Erkodur is thermoformed to fabricate intra-oral appliances such as:

Application	Thickness recommendation
Aligners/correction splints	0.5 – 1.0 mm
Occlusal, Bruxism and michigan splints	1.5 – 2.5 mm (adding) 3.0 – 5.0 mm (subtracting)
Stabilization splints	1.0 mm
Copings	0.5 – 0.8 mm
Temporary appliances (Connection to resin for temporaries only with PV-Primer)	0.6 – 1.0 mm
Silensor-sl anti-snoring device	2.5 mm
Dressing plates	1.0 – 2.0 mm
Drilling-, planning and X-ray templates	1.0 – 5.0 mm
Retainers	0.6 – 1.5 mm
Protection splints (implantology)	1.0 mm
Cosmetic splints	0.6 – 2.0 mm (-A1/-A2/-A3/-0M1)

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

## 3. Composition

CAS-No.: 25640-14-6

Designation: Polyethylenterephthalat (PET-G)

#### 4. Properties

## General properties:

Properties	Guideline	Value
Form	-	very tough, hard
Colour	-	clear, turquoise, tooth colour
Odour	-	inodorous
Density	ISO 1183	1.27 g/cm <sup>3</sup>
Water absorption, 24 h/23 °C	ISO 62	0.2 %
Water solubility	-	insoluble

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#### Mechanical properties:

Properties	Guideline	Value
Tensile strength	ISO 527	53 MPa
Flectional strength	ISO 178	69 MPa
Impact strength, 23 °C	ISO 179	no break
Notch impact, 23 °C	ISO 179	10 kJ/m²
Yield stress	ISO 527	53 MPa
Elongation at break	ISO 527	40 %
E-modulus	ISO 527	2200 MPa
Hardness shore A/ shore D	D 868	-
Rockwell hardness	D 785	115 MPa

#### Thermal properties:

Properties	Guideline	Value
Vicat softening point	D 1525	83 °C
Temperature resistance, 1.80 MPa	ISO 75	68 °C
Glass transition temperature	ISO 11357	-
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 – 35 °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.

The information on this product data sheet corresponds to the best of our knowledge at the time of printing. The information is not guaranteed assurance of product properties and does not constitute a contractual legal understanding. Input errors and mistakes reserved.