

Product datasheet Erkolen



1. Manufacturer information

Trade name:	Erkolen
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

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

Application	Thickness recommendation
See the respective instructions	See the material data sheet

3. Composition

CAS-No.:	9002-88-4
Designation:	Polyethylen (PE)

4. Properties (all data are approximate values)

General properties:

Properties	Guideline	Value
Form	-	soft, resilient
Colour	-	transparent
Odour	-	inodorous
Density	ISO 1183	0.924 g/cm ³
Water absorption, 24 h/23 °C	ISO 62	-
Water solubility	-	insoluble

Mechanical properties:

Properties	Guideline	Value
Tensile strength	ISO 527	25 MPa
Flexional strength	ISO 178	-
Impact strength, 23 °C	ISO 179/1eU	-
Notch impact, 23 °C	ISO 179/1eA	-
Yield stress	ISO 527	11 MPa
Elongation at break	ISO 527	250 %
E-modulus	ISO 527	260 MPa
Hardness shore A/ shore D	ISO 868	40 Shore D
Ball indentation hardness	ISO 2039/1	18 MPa

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Thermal properties:

Properties	Guideline	Value
Vicat softening point	ISO 306	94 °C
Temperature resistance	ISO 75	-
Glass transition temperature	ISO 11357	-
Shrinkage after thermoforming	-	-

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.