

Product datasheet Erkocryl



1. Manufacturer information

Trade name:	Erkocryl
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

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

Application	Thickness recommendation
Orthodontic/ extension plates	2.0 and 2.5 mm
Interim prosthesis	2.0 and 2.5 mm
Denture bases	2.0 and 2.5 mm
Compression or dressing plates	1.5 and 2.0 mm

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

3. Composition

CAS-No.:	9011-14-7
Designation:	Polymethylmethacrylat (PMMA)

4. Properties

General properties:

Properties	Guideline	Value
Form	-	stable, hard
Colour	-	clear, rose
Odour	-	inodorous
Density	ISO 1183	1.17 g/cm ³
Water absorption, 24 h/23 °C	ISO 62	1.7 %
Water solubility	-	insoluble

Mechanical properties:

Properties	Guideline	Value
Tensile strength	ISO 527	-
Flectional strength	ISO 178	-
Impact strength, 23 °C	ISO 179/1eU	25 kJ/m ²
Notch impact, 23 °C	ISO 179/1eA	-
Yield stress	ISO 527	62 MPa

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Elongation at break	ISO 527	22 %
E-modulus	ISO 527	2400 MPa
Hardness shore A/ shore D	ISO 868	-
Ball indentation hardness	ISO 2039/1	-

Thermal properties:

Properties	Guideline	Value
Vicat softening point, 50 °C/h 50 N	ISO 306	102 °C
Temperature resistance, 1.80 MPa	ISO 75	96 °C
Glass transition temperature, 10 °C/min	ISO 11357	112 °C
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 – 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.

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