

## Product datasheet Erkodur-S



### 1. Manufacturer information

Trade name:	Erkodur-S
Intended use:	Fabrication of hard mid-layers for sports mouthguards
Manufacturer:	Erkodent Erich Kopp GmbH Siemensstraße 3 72285 Pfalzgrafeweiler Germany Tel.: +49 7445 8501-0

### 2. Intended use

Erkodur-S is thermoformed to fabricate the hard mid-layer for sports mouthguard Playsafe heavy-pro or light-pro.

Application	Thickness recommendation
Playsafe sports mouthguard, hard mid-layer for Playsafe heavy-/light-pro	0.8 mm

### 3. Composition

CAS-No.:	9003-53-6
Designation:	Styrene-Butadien-Styrene (SBS)

### 4. Properties (all data are approximate values)

#### General properties:

Properties	Guideline	Value
Form	-	hard
Colour	-	clear
Odour	-	inodorous
Density	ISO 1183	1.02 g/cm <sup>3</sup>
Water absorption, 24 h/23 °C	ISO 62/1	0.07 %
Water solubility	-	insoluble

#### Mechanical properties:

Properties	Guideline	Value
Tensile strength	ISO 527	-
Flectional strength	ISO 178	48 MPa
Impact strength, 23 °C	ISO 179/1eU	25 kJ/m <sup>2</sup>
Notch impact, 23 °C	ISO 179/1eA	2 kJ/m <sup>2</sup>
Yield stress	ISO 527	35 MPa
Elongation at break	ISO 527	20 %
E-modulus	ISO 527	1800 MPa
Hardness shore A/ shore D	ISO 868	72 Shore D

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Ball indentation hardness | ISO 2039/1 | -

### Thermal properties:

Properties	Guideline	Value
Vicat softening point, 50 °C/h 50 N	ISO 306	63 °C
Temperature resistance, 1.80 MPa	ISO 75	59 °C
Glass transition temperature	ISO 11357	-
Shrinkage after thermoforming	-	0.3 – 1 %

### 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.*