Product datasheet HARDCAST®

1 Identification of the substance / preparation / company

Product details

Trade name:	**HARDCAST ®**
Application of the substance / preparation:	Manufacture of dental pressure moulding splints.
Manufacturer / Supplier:	Scheu Dental GmbH Am Burgberg 20 58642 Iserlohn Germany Tel. 0049 2374 9288-0

2 Composition / information on ingredients

Chemical characterization

CAS-Number:	9003-07-0
Designation:	Polypropylen (PP)

3 Handling and storage

Handling

Information for safe handling:	When using do not eat, drink or smoke. Provide suction extractors if dust is formed.

Storage

Storage conditions:	Store dry and dark at max. 30°C

4 Physical, chemical, mechanical and biological properties

4.1 General properties

Properties	Guideline	Value
Form	-	Solid
Colour	-	Transparent
Odour	-	Odourless
Density	ISO 1183	0,901 g/cm^3
Water absorption after 24 h at 23°C	ISO 62 Methode 1	<0,1 %

Product datasheet HARDCAST®

4.2 Mechanical properties

Properties	Guideline	Value
Tensile strength	ISO 527	> 28 MPa
Flectional strength	ISO 527	-
Impact strength 23°C	ISO 8256	600 KJ/m² or no fracture
Notched 23°C	ISO 179/1eA	5 KJ/m² or no fracture
Yield strain	ISO 527	11 %
Yield stress	ISO 527	25 MPa
Elongation at tear	ISO 527	> 500 %
E-modulus	ISO 527	890 MPa
Hardness Shore A	DIN 53505	-
Hardness Shore D	DIN 53505	70
Rockwell Hardness	ISO 2039-1 H358/30	72

4.3 Thermal properties

Vicat softening point	ISO 306 Methode A ISO 306 Methode B	154 °C 90 °C
Thermoform resistance	ISO 75 Methode A ISO 75 Methode B	55 °C 85 °C
Continuous stress temperature	ISO 75	100 °C

4.4 Biological properties / Biocompatibility

The material has been tested on biocompatibility according to DIN EN ISO 10993. It meets the requirements regarding biological compatibility for medical products / devices.

5 Stability and reactivity

Thermal decomposition / Conditions to avoid:
No decomposition by indended use.

6 Disposal

The material can be recycled after separation or deposed of like commercial or household waste.

The aforementioned data are given most conscientiously but without any obligation. Any processing details are provided merely for guidance: it is the user's responsibility to check the suitability of the product for the intended application.