



SMILE PEEK

Use: Structure, substructures, bars

Colors: light beige

Cod : 00720 h. 14, 16, 20 mm

SMILE PEEK Classification : Medical devices Classe IIa Direttiva 93/42

Smile Peek is a polymer based on a polyetheretherketone, devoid of metallic oxides and monomer. Its elasticity is comparable to the bone tissue and, unlike thermoplastic materials, do not produce galvanic effects and does not induce thermal conductivity. As the TSM Acetal Dental, Smile Peek also has the ability to absorb / dissipate the compression masticatory forces, simulating somehow periodontal effect.

The product, thanks to their features, guarantee a long term use.

In the planning step it is good to consider the thickness of the edges and the connections, to avoid possible problems of "detachment" due to the elastic modulus difference between the product Smile Peek and the aesthetic coating.

In case the product is to be coated with acrylic or composite resins, it is the product available "Acecristil" that allows to obtain a physical and chemical adhesion.

Technical features	Test method	Unit	values
TENSILE TEST MAXIMUM LOAD	ISO 527	N	5095
BREAKING LOAD	ISO 527	N	4108
MAXIMUM STRESS FOR MM ²	ISO 527	MPA	100.
BREAKING STRESS FOR MM ²	ISO 527	MPA	81
MAXIMUM ELONGATION IN %	ISO 527	MPA	95.
ELONGATION AT BREAKIN %	ISO 527	MPA	117
TENSILE TEST MAXIMUM LOAD	ISO 178	N	468
BREAKING LOAD	ISO 178	N	377
MAXIMUM STRESS FOR MM ²	ISO 178	MPA	178
BREAKING STRESS PER MM ²	ISO 178	MPA	143
STRAIN AT BREAK	ISO 178	MPA	12
ELASTIC MODULE (%) 0.25	ISO 178	MPA	3805
HARDNESS ROCKWELL Scala L	ISO 2039/2	HRA	56
HARDNESS SHORE D	DIN 53505	Shore D	85
ABSORPTION	ISO 10477	ug/mm ³	1.7
SOLUBILITY	ISO 10477	ug/mm ³	0.1

minimum thickness

Occlusal > 1.mm
Lingual > 07mm

Area Connections

Incisors group > 12 mm²
Posterior teeth > 14 mm²

Dental bridge Max

2 missing element

Working phase:

Use the standard method for PMMA/
Composit during the milling operations.

We recommend to use a single end
cutting edge for a better surface finish.

The milling can be carried out both with
dry or lubro-refrigerant method.