



ABN 92 406 109 452

## Smileflex™ Day Guard+

Product and Safety Data Sheet

### 1. MANUFACTURING INFORMATION

Product name: Day Guard+  
Product intended use: For the temporary treatment of teeth bruxism.  
Manufacturer: Smileflex  
ABN 92 406 109 452  
smileflex.com.au  
Country of manufacture: Australia

### 2. MATERIAL INTENDED USE

The material is thermoformed to fabricate intra-oral appliances such as:

Application	Thickness recommendation
Bruxism splints	2.0mm

The thickness recommendation is a non-binding suggestion based on market observation.

### 3. COMPOSITION

CAS No.:	25640-14-6	9018-04-6
Designation:	Polyethylene terephthalate (PETG)	Thermoplastic polyurethane (TPU)

### 4. MATERIAL PROPERTIES

General properties:

Properties	Guideline	Value – PETG	Value – TPU
Form	-	very tough, hard	soft
Colour	-	clear	clear, pink, blue, green
Odour	-	inodorous	inodorous
Density	ISO 1183	1.27g/cm <sup>3</sup>	-
Water absorption	ISO 62/1	0.2%	-
Water solubility	-	insoluble	insoluble

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#### 4. MATERIAL PROPERTIES (cont.)

##### Mechanical properties:

Properties	Guideline	Value – PETG	Value – TPU
Tensile strength	ISO 527	53MPa	38.6MPa
Flectional strength	ISO 178	69MPa	-
Impact strength, 23 °C	ISO 179/1eU	no break	-
Notch impact, 23 °C	ISO 179/1eA	10kJ/m <sup>2</sup>	-
Yield stress	ISO 527	53MPa	5.5MPa
Elongation at break	ISO 527	40%	590%
E-modulus	ISO 527	2200MPa	26.9MPa
Hardness shore A/ shore D	ISO 868	-	85 Shore A
Rockwell hardness	D 785	115MPa	-

##### Thermal properties:

Properties	Guideline	Value – PETG	Value – TPU
Vicat softening point	ISO 306	83°C	80°C
Temperature resistance, 1.8 MPa	ISO 75	68°C	-
Glass transition temperature	ISO 11357	-	-46°C

##### Biological properties:

The materials have been tested for biocompatibility according to DIN EN ISO 10993-1 and do not affect the user's biological safety. The materials are non-toxic and not made with Latex, do not contain DEHP (or other Phthalates), or Bisphenol A (BPA), and are monomer and gluten free.

#### 5. GENERAL INFORMATION

**Storage instructions:** Use provided protective case. Keep away from sunlight. Keep dry.

**Recommended storage temperature:** 5°C–35°C

**Instructions for cleaning and maintenance:** Best results are achieved with cleansing tablets.

**Further cleaning agents:** Soap, curd soap, liquid soap and dish liquid. Do not use any strongly perfumed soaps.

**Not suitable cleaning agents:** Toothpaste, mouthwash and water that is hotter than 50°C. Solvent-based cleaning agents cause delamination of product layers.

**Sterilisation:** A sterilisation with gas and plasma (<50°C) is possible. As a result of the thermolability, the product is not autoclavable.

The information on this data sheet corresponds to the best of our knowledge at the time of publishing. The information is not guaranteed assurance of product properties and does not constitute a contractual legal understanding. Input errors and mistakes reserved. Modification date: 2023-10-08