

# Product datasheet DURAN<sup>®</sup> +

## 1 Identification of the substance / preparation / company

### Product details

|   |   |
|---|---|
| Trade name:                                 | <b>DURAN<sup>®</sup> +</b>  |
| Application of the substance / preparation: | Manufacture of dental pressure moulding splints.  |
| Manufacturer / Supplier:                    | Scheu Dental GmbH<br>Am Burgberg 20<br>58642 Iserlohn<br>Germany<br>Tel. 0049 2374 9288-0 |

## 2 Composition / information on ingredients

### Chemical characterization

|              |  |
|--------------|--|
| CAS-Number:  | PET-G: 25640-14-6 / PE: 9002-88-4  |
| Designation: | Polyethylenterephthalat-Glycol Copolyester (PET-G)<br><b>With a peelable PE insulating foil!</b> |

## 3 Handling and storage

### Handling

|                                |   |
|--------------------------------|---|
| Information for safe handling: | When using do not eat, drink or smoke.<br>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 or tooth-colored (VITA A2 or 0M1) |
| Odour                               | -         | Odourless                                     |
| Density                             | ISO 1183  | 1,27 g/cm <sup>3</sup>                        |
| Water absorption after 24 h at 23°C | ISO 62-4  | 0,2 %   |

## Product datasheet DURAN<sup>®</sup> +

### 4.2 Mechanical properties

| Properties           | Guideline          | Value                |
|----------------------|--------------------|----------------------|
| Tensile strength     | ISO 527            | 53 MPa               |
| Flexional strength   | ISO 527            | 69 MPa               |
| Impact strength 23°C | ISO 179/1eA        | 10 KJ/m <sup>2</sup> |
| Notched 23°C         | ISO 180/1A         | 12 kJ/m <sup>2</sup> |
| Yield stress         | ISO 527            | -                    |
| Elongation at yield  | ISO 527            | 5%                   |
| Elongation at tear   | ISO 527            | 40 %                 |
| E-modulus            | ISO 527            | 2200 MPa             |
| Hardness Shore A     | DIN 53505          | -                    |
| Hardness Shore D     | DIN 53505          | 78                   |
| Rockwell Hardness    | ISO 2039-1 H358/30 | 115                  |

### 4.3 Thermal properties

|                               |                 |        |
|-------------------------------|-----------------|--------|
| Vicat softening point         | ISO 306         | ~ 80°C |
| Thermoform resistance         | ISO 75 Method A | 68°C   |
|                               | ISO 75 Method B | 72°C   |
| Continuous stress temperature | ISO 75 Method A | 68°C   |
|                               | ISO 75 Method B | 72°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 intended use.

## 6 Disposal

The material can be recycled after separation or disposed off 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.