

Description:

DURASOFT® pd is a high-quality two-component compression moulding material that is manufactured in a complex co-extrusion process and consists of a hard PETG carrier material and a soft thermoplastic polyurethane layer (TPU).

If processed correctly, the two materials will not separate. DURASOFT® pd is highly resistant to abrasion and breakage. The material meets the requirements regarding biocompatibility for medical devices. Due to their hygroscopic properties, the foils are pre-dried in a gentle process and individually heat-sealed in barrier bags. Please refer to the information below.

Thanks to the soft, flexible side, which makes inserting and wearing the splint particularly comfortable for the patient, DURASOFT® pd is ideal for use in splint and snoring therapy, for example.

Preparation of the model:

For optimum transparency and an aesthetically smooth inside of the splint, the model must be insulated with ISOFOLAN® foil.

The ISOFOLAN® foil is trimmed in the area of the splint expansion and provided with interdental/occlusal air extraction holes (probe/scalpel). For 3D-printed models, the use of an unperforated protective film such as ISOFOLAN® (REF 3207) is mandatory.

Thermoforming:

The insulated model is embedded in the granulate and coated with DURASOFT® pd. To prevent discolouration of the soft inner layer, an optional DURASOFT® seal film can be used. For the code and heating time of the DURASOFT® pd foils, please refer to the film imprint or the labels. For optimum thermoforming results, the material should be processed in a temperature range between 160 °C and 175 °C.

Adjustment:

If an adjusted occlusal splint is indicated, the hard side (PETG) can be built up with autopolymerisable, e.g. DURASPLINT®. The splint must not be roughened before the build-up with acrylic. To avoid thermal tensions and poor fit, the thermoformed splint is not yet finalised; DURASPLINT® monomer is applied twice to the occlusal surface. The monomer should not come into contact with the soft part of the DURASOFT® splint. Otherwise the lamination may be weakened. Polymerisation is carried out according to the manufacturer's instructions, only then is the splint finally lifted off and finished. Alternatively, it is possible to grind in DURASOFT® pd from a thickness of 3.0 mm in order to apply an adjustment. This is particularly useful in cases of known MMA incompatibility. We recommend the LC-Bur A (REF 3267), LC-Bur B (REF 3268) and LC-Bur C (REF 3265) for grinding in the adjustment.

Finishing:

We recommend the finishing set (REF 3378) for finishing. The splint can be roughly separated from the model with a HM Carbide cutter (REF 3369) or cutting bur (REF 3214). The finer finishing – particularly in the interdental space – is done with the fine tricutter (REF 3370). Both Polyfix in brown (REF 3371) and OSAMU polishers (REF 3247) have proven themselves for the final processing and polish stage. To polish and smooth of hard/soft material transitions as well as rework of the soft splint parts, the DIMO®, DIMO® PRO (REF 3380-3384) and DIMO® PRO SLIM (REF 3376) trimming wheels are perfect.

Cleaning/care:

Daily cleaning with CETRON® powder from our CETRON® range is recommended. The splint can also be cleaned using a denture brush and water. To avoid any changes, discoloration or damage to the splint, do not use cleaning products that contain oxidizing agents (active oxygen, chlorine, etc.). Organic solvents such as ethanol, acetone, etc., are also unsuitable for cleaning. Some plant-based products for the temporary treatment of painful and inflammatory conditions of the oral mucosa, especially vesicles, as well as for the supportive symptomatic treatment of gingivitis can also lead to severe discolouration, swelling or destruction of the plastics and must be avoided at all costs (e.g. PYRALVEX®). Discolouration can also occur when dental filling materials or dental prostheses (amalgam, chromium-cobalt-molybdenum, precious metal-reduced alloys) interact. Steam jets, ultrasonic devices, denture cleaners and cleaning procedures that exceed 45°C should be avoided.

Safety notes:

When processing DURASOFT® pd, the maximum temperature of 175°C must not be exceeded. The radiator temperature is shown on the display of the SCHEU-DENTAL thermoforming units; however, the actual film temperature is lower and time-dependent.

You can find the complete range of materials at: www.scheu-dental.com/pressure-moulding-material.