# PLAY SAFE<sup>®</sup> triple/-light sports-mouthguard

# **Materials & Accessories**

#### **Fabrication:**

- Playsafe triple (-light) start set 177 810 (177 850): 1 Playsafe triple (-light) set, transparent, 1 Playsafe bite spacer, 1 Playsafe face chuck
- 1 Playsafe triple (-light) set 177 820 (177 860): 1 Playsafe triple (-light) foil (colour has to be indicated), 1 label, 1 Erkobox, 1 sample FG-sheet, instructions
- 5 Playsafe triple (-light) foils 177 825 (177 865), colour has to be indicated, 5 labels

### Model preparation:

• Erkogum (110 844) for blocking-out, high-fusing wax (725 080) to fill bubbles in the plaster

# Finishing: 😨 😭

Finishing set Quick 3 (110 830)
Special scissors XL (220 301)
Hot air burner (177 540)
FG sheets (177 400)

#### Hints

- For an optimal mouthguard, the upper jaw model should represent the entire vestibule.
- To determine the bite proportions there is ideally a construction bite available with a spacing of 3 4 mm (2 3 mm, triple light).
- The easiest and quickest way to fabricate a Playsafe triple is with the Erkoform units as of serie 3 with Occluform-3.
- With some additional efforts the fabrication is also possible with the Erkopress units.
- With Playsafe 4 u almost each favourite design on all Playsafe types is possible (www.erkodent.com).

## Playsafe triple (-light):

The better protective effect of laminated sports mouthquards in comparison to single-layered mouthguards is sufficiently known. However, the fabrication of laminated sports-mouthguards is much more complex.

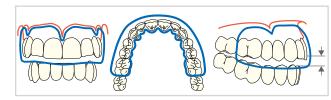
A Playsafe triple can be fabricated in about the same time as a single-layered sports-mouthguard but provides at least the same protective effect at smaller proportions than a three-layered version.

The Playsafe triple plate is already three-layered, inside and outside soft and in between hard. Thermoform once and imprint the articulation surface in a tricky way, allow to cool off and elaborate, if desired, also apply the label, finished.

The surface that allows movement for the athlete automatically shows a lateral stop (buccal shield) by the imprinting. This can absorb lateral impacts.

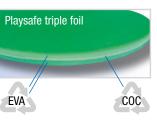
A Playsafe triple sports-mouthquard is always fabricated for the upper jaw. It covers as much as possible of the vestibule and ends palatinally about 1 mm in the gingival area.

Model preparation: Fill plaster bubbles with blocking out wax. Block-out undercuts of a possibly existing gap (special case) with Erkogum.



The Playsafe triple includes the first molar. Depending on the bite proportion the bite-lifting is 3-4 mm (2-3 mm, triple light) at the incisal point. Mostly it has to be lifted at average values.

Trim the lower jaw model near to the teeth row. The lower jaw model can be used even if only half of the tooth height is represented.









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Erkoflex 2.5 mm

(Erkoflex 1.5 mm)

Triple layer 1.0 mm

Erkoflex 2.0 mm

\*Articulation

surface with

buccal shield

(Erkoflex 2.0 mm)

Buccal shield as pro-

tection against lateral

impacts

(Triple layer 0.6 mm)

# Fabrication with the Erkoform units as of serie 3\* and Occluform-3

if required program the Playsafe triple foil information (see foil packaging) as new foil.

1. Fix the upper jaw model in the Occluform-3 model pot, the vestibule has to protrude from the edge of the pot. Fill the pot with granules, shake the pot to ensure that the granules will get underneath the model as well.

3. ... only for the fabrication way shown here block the lower joint. This leads to more free moving space of the lower jaw on the articulation surface.

5. Clamp the Playsafe triple foil into the foil reception, the isolating foil showing towards the model.

#### 7. Thermoform. do not close the Occluform-3 yet. Wait for one minute of the cooling time (9:00 on the display) and only then close the Occluform-3 until the supporting pin gets contact!

9. Lift the foil reception, loosen the foil securing ring and remove the foil together with the model pot through the foil reception. Loosen model and remove it.

**11.** Cut out the Playsafe triple (light) with the fissure bur and grind it with the tungsten carbide bur. Smooth with Liskosil-I resp. at narrow spaces with Liskosil-m or Liskosil-s.

13. The name can also be ordered at Playsafe 4 u in design letters. (Or write the name on paper (or similar) and fix it with quick-acting glue that way that the writing shows towards the printed side of the label.)

15. If necessary, heat the edge of the label again and press it on with the FG sheet. Allow to cool down and smooth it with Liskosil-I or Liskosil-m (10 000 rev/min). Take it off the model and remove the isolating foil.

# Fabrication with the Erkopress units

Thermoform the Playsafe triple foil with the entire vestibule. Best take the foil off the model with the take-off pliers (110 880) and finish it (see 10., 11. and 12.).

2. Clamp in the Playsafe bite spacer. Properly heat the occlusal surface of the Playsafe triple with the hot air burner (stroke the hot-air burner slowly about 40 times! at a short distance over the occlusal surface).

































2. Put the Playsafe face chuck into the upper model disc and fix the lower jaw model onto it.

Recommendation for the adjustment of the Occluform-3 in deep bites: ...

4. Occludate the models in the Occluform-3 in the final bite position or with a construction bite. If working without construction bite lift the bite for 3-4 (2-3, triple light) scale marks. Open the Occluform-3.

6. While the foil gets heated clip the Playsafe bite spacer onto the face chuck as shown.

8. Before opening the Occluform-3 again, wait the entire cooling time.

10. Best take the foil with the take-off pliers (110 880) off the model.

12. Replace the sports-mouthguard on the model and fix the label. Also Playsafe 4 u favourite design will be applied in the same way. Perhaps provide the label with the name of the athlete

14. Heat the label area with the hot air burner (respectively first practice with a leftover foil) and put the label on top, attention, it cannot be removed anymore. Press on the label with the FG sheet.

16. Break and smooth the vestibular inner edge (Liskosil-I or Liskosil-m and -s).

Put it back onto the model and shine the Playsafe triple with the hot air burner, finished.

**1.** Fix the models with plaster into an articulator. in doing so insert 7 suitable clamping pins (e.g. old drill shafts) underneath the lower jaw model into the still soft plaster.

3. Block the bite at about 3-4 mm (2-3 mm, triple light) and imprint the articulation surface.

All further working steps as described above.



