

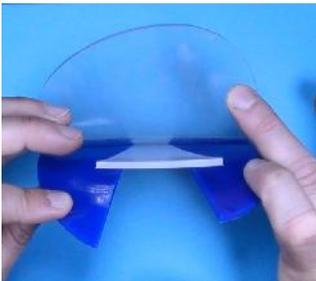


Fabricating a Mouthguard with Xtreme Mouthguard Material

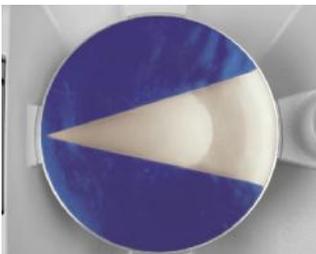
Safety glasses should be worn for all lab procedures as well as gloves when handling acrylics. Items featured in this technique are found on the last page.



- 1 The Bioplast Xtreme and Xtreme Pro materials offer extra protection in sports mouthguards with the integrated reinforcement to the anterior region. Impacts can be absorbed in contact sports using this innovative material.



- 2 Three different grades of hardness are integrated into a single pressure molding material.
4mm Bioplast Xtreme Pro is made up of a clear 1mm Bioplast laminate cover plate consisting of Shore 80A hardness, a v-shaped clear 3mm Bioplast frontal reinforcement middle section consisting of Shore 92A hardness, and a 3mm Bioplast blue, red, or black surrounding outer sections consisting of Shore 80A hardness. The 5mm Bioplast Xtreme is made of the same material as the Pro with the exception of a thicker, clear cover plate that is a 2mm Bioplast laminate consisting of Shore 80A hardness.



- 3 The size of the anterior protection area can be varied as a result of the V-shaped hard anterior insert.



- 4 The heating time for the 4mm Xtreme Pro is 100 seconds or Biostar® code 247. Heating time for the 5mm Xtreme material is 140 seconds or Biostar® code 277.

For this example, the 4mm Xtreme Pro material will be used on the MiniSTAR®.



- 5 Clamp the Bioplast Xtreme Pro material on the chamber. Align the point of the clear v-shape to the left side of the pressure chamber.



- 6 Align the clamping frame over positioned material. To avoid shifting the position of the material, apply light pressure on the material while securing clamping frame.



- 7 Apply liquid separator to the prepared model with a brush. A thin coat should cover model surfaces that will contact forming material.



- 8 Position model on the center of the platform. When using the Bioplast Xtreme, position the model so that the anterior teeth are reference towards the open chamber with clamped material.



- 9 Check alignment of center v-shape of clamped material by swinging the pressure chamber over the model to verify alignment. Adjust model on platform as necessary.



- 10 Enter the heating time of 100 seconds into the MiniSTAR.



- 11 Swing the heater over the clamped material to initiate the heating cycle.



12 At the end of the heating cycle, remove the heater and swing the chamber over the model on the platform. Lock chamber in place to initiate the forming and cooling cycle. Allow formed material to cool under pressure for 3-5 minutes.



13 At the end of the cooling cycle, release the pressure, unlock the chamber and open the machine. Remove material and model from platform.



14 Heat a lab knife with a torch.



15 Cut out mouthguard shape while formed material remains on model. Discard outer plastic.



16 Remove rough cut mouthguard from model. Trim and finish following standard mouthguard techniques.

Items featured in technique:

- 235-010 Astro Spec Safety Glasses (reg./blue)
- 235-062 N-Dex Non-latex Gloves (Med)
- 030-009 4mm Bioplast Xtreme Mouthguard Material
- 175-034 Separator
- 075-007 Separator Brushes
- 080-006 Micro Torch
- 080-009 Gas Refill
- 170-005 Lab Knife



800.828.7626 (US & Canada)
716.871.1161 (Worldwide)
716.871.0550 (Fax)
E-Mail: info@greatlakesortho.com
Website: www.greatlakesortho.com