

Plastic Materials

For Prosthetic
Applications



thyssenkrupp



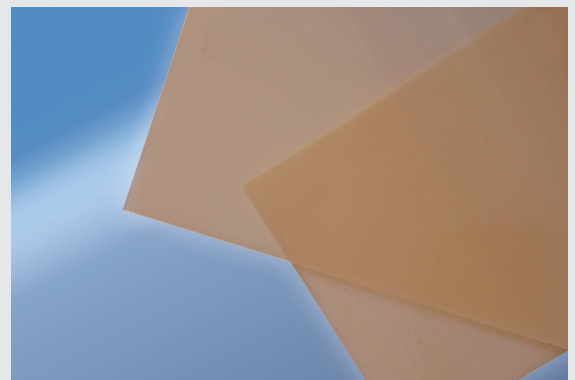
Or-Pro Flex

Or-Pro Flex (Formerly called (AINFlex) is a very smooth finish polypropylene material designed specifically for O&P applications. Customers enjoy the unique “Soft-Touch Finish” which works well with no need for silicone lubrication. Or-Pro Flex is excellent for bubble forming applications. A typical 3/8 inch thick piece will pull evenly to approximately 1/8 inch thickness with no thin spots. It is available in natural, gloss black and flesh.

Or-Pro Flex has good strength and is resistant to fatigue. It also possess good chemical resistance. It is an excellent choice for AK and BK Sockets and AFO cushioning or applications where shock absorption is important.

Features and Benefits:

- “Soft-Touch Finish”
- Good shock absorption
- Fatigue resistant
- Pulls easily and uniformly
- Flexible
- Flesh is semi-translucent
- Available Sizes:
1/8 up to 5/8 in. thicknesses
- Available Colors:
Natural, Gloss Black, Flesh
- Forming temperature:
325 °F to 350 °F





Or-Pro Stiff

Or-Pro Stiff is a crystal clear, hard co-polyester check socket or test socket material. Like PETG (Vivak®) Or-Pro Stiff is easy to mold. It can also be welded. This material pulls easily to create uniform thickness. It is ultra tough and resists cracking, shattering or breaking.

When pulled using water the clarity of the image to the left can be achieved. When using silicone during the pull process the result is translucent (see image below).

Features and Benefits:

- Excellent Clarity
- Mold-able
- Weldable
- High Stiffness
- Will not crack, shatter or break
- No shrinkage when pulled
- Pulls easily and uniformly
- Available Thicknesses: 3/8", 1/2", 5/8"



Best Practice Notes for Deep Draw Applications

- Make sure your plaster mold is completely dry and hand warmed. The surface of your casting should be smooth and sprayed with an even coating of Or-Pro 100 6% silicone-spray or for optimum clarity spray with water.
- For thermoforming, infra-red ovens are preferred for use, but other ovens/heating cabinets will work as well.
- Be sure the deep draw frame is at 160°C to 170°C and placed in a way that hot air will evenly heat all parts of the bubble formed Or-Pro Stiff material.
- When working with extra large TF-stump molds many users have found it is best to pre-form the "bubble" by hand. Be sure to wear soft protective gloves and use talcum powder to help avoid finger prints.



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