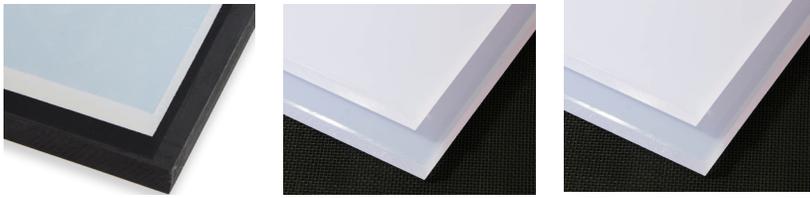


EVA (Duraflex®, OP-TEK® Flex, Proflex)

Soft, flexible plastic with low-temperature toughness and stress-crack resistance



EVA is widely used for:

- Soft inner liners for rigid socket frames
- Inner boots for pediatric AFOs
- Orthotics for hand and wrist

Performance characteristics:

- Excellent moldability
- Lightweight
- Impact resistant

Flexible EVA (ethylene vinyl acetate) is the copolymer of ethylene and vinyl acetate. It is an extremely elastic material that can be processed like other thermoplastics. This material has low-temperature toughness, stress-crack and UV radiation resistance. In the Orthotics and Prosthetics market, fabricators know this material as either: Duraflex®, OP-TEK® Flex, or Proflex. (Note: Each brand may exhibit slight variations of grades and flexibility.)

EVA Material Options

OP-TEK® Flex– is a soft, flexible EVA copolymer that provides for outstanding patient comfort when used as a liner for rigid socket frames. OP-TEK® Flex is specially formulated to maintain more consistent walls during forming compared with many other flexible plastics.

OP-TEK® Flex Comfort– is a soft, flexible EVA copolymer with a proprietary additive that gives the material a softer feel. This enhanced surface provides superior patient comfort when used as a liner for rigid socket frames. The additive greatly reduces friction when patients don and doff prosthetic devices. Unlike EVAs with silicone, OP-TEK® Flex Comfort exhibits excellent seaming characteristics during drape forming and more consistent walls during blister/bubble forming compared with many other EVA copolymer materials. OP-TEK® Flex Comfort is available in both natural and black.

OP-TEK® Flex BiLam– provides added comfort and improves aesthetics for patients wearing carbon socket frames. The inner layer contains a hypoallergenic, FDA compliant additive that reduces friction, and the outer layer helps hide trim lines and window cut-outs of carbon socket frames.

Duraflex®– is a soft, flexible EVA copolymer that provides patient comfort when used as a liner for rigid socket frames. Duraflex® is harder and a little more rigid than OP-TEK® Flex and Proflex. It is available in natural (semi-transparent) and black.

Proflex– is a soft, flexible EVA copolymer that provides a superior level of patient comfort when used as a liner for rigid socket frames.

Proflex with Silicone (Proflex-S)– is a soft, flexible EVA copolymer with a silicone lubricant. Like Proflex it provides a superior level of patient comfort when used as a liner for rigid socket frames. The silicone reduces friction when patients don and doff prosthetic devices.

TYPICAL PROPERTIES OF EVA COPOLYMER SHEETS

PHYSICAL PROPERTIES	UNITS	ASTM Test	OP-TEK® Flex (All grades)	Duraflex®	Proflex and Proflex-S
Density (weight)	g/cm ³	D1505	0.952	0.885	0.950
Tensile strength @ yield	psi	D638	3480	2650	1520
Flexural modulus (stiffness)	psi	D790	3050	4790	3500
Shore hardness	-	D2240	D-28	D-31	D-33
Forming Temperature	°F		250°-260° F	266° F	350° F

Values may vary according to brand name. Please ask your Curbell Plastics representative for more specific information about an individual brand.