

EVOLUTION

Evolution is a cork and recycled EVA and PU foam material, agglomerated with a polyurethane binder, specially formulated to allow the possibility of thermoforming in typical thermoforming processes such as those used in insole production and molded orthopedic components. The material is multicolor, color variation can occur without impact on the material properties.

MATERIAL DESCRIPTION

Available format	Sheets: 2 to 10 mm ⁽¹⁾
	Rolls: 2 to 10 mm ⁽¹⁾
Material	Cork recycled EVA agglomeration
Color	Brown with diverse colors of EVA
Density (kg/m ³)	250–320
Hardness (Shore A)	25–50
Other characteristics	<ul style="list-style-type: none"> • PVC free • Latex free • Formaldehyde free • 100% Vegan (cork and EVA only) • 100% recyclable

(1) Other thickness only under request.



PROCESS RECOMMENDATIONS ⁽²⁾

Thermoforming process recommendation

Mechanical and vacuum (membrane) Thermoforming

MATERIAL RECEPTION AND PREPARATION

- Material should be unpacked at least 2 hours prior to heating and molding; maintaining a stable environment.
- Precutting forms/pieces recommended for a better material optimization and molding results.

MOLDING PROCESS

- Deep drawing and sharp edges caution should be taken at material above 3mm thickness.
- Multilayer combinations or piling (with other materials) follow standard practices.
- Material should be inserted in the heating chamber (oven), at temperatures between 140-180 °C, for a time period ranging from 30s to 1min depending on material thickness, size and component design.
- Molding time should be defined based on component complexity size, thickness and mold temperature. Typically refrigerated mold result in lower cycle times (within seconds).
- Demold and trim according to custom practices.

(2) These conditions are indicative and should be adjusted for customer process.

