

## Technical Specifications AmCork Flooring Products

AmCork flooring products are made from the bark of cork oak trees. Only the bark is harvested, trees are never felled. Harvesting the bark once a decade actually prolongs the life of the cork oak, which can exceed a century. In addition to this entirely natural substance, there are other components in all cork flooring products. AmCork elects to fully disclose the comprehensive specifications for the binders, glues, pigmentation and varnish used in its own products, including toxicology data. AmCork products are manufactured to critical specifications for food service and healthcare applications.

**Binder** TDI based polyurethane agglomerative resin developed for manufacturing agglomerated cork blocks using high-frequency curing. Quantity is 5% to 7% of the granulated cork mass to agglomerate. This binder is formaldehyde-free and no emissions are to be expected from the finished product.

The components of this prepolymer are included in the list of positive substances and authorized raw materials for the production of agglomerates that can come into contact with food, according to EEC and FDA legislation.

<b>Binder Specifications</b>	<i>Type of polymer:</i>	Polyurethane
	<i>Viscosity @ 20° C:</i>	2000 ± 500 mPa.s.
	<i>Density:</i>	1.05
	<i>Solid content:</i>	99%
	<i>NCO groups:</i>	3.6 ± 0.25%

**Binder Toxicology** This product, after complete reaction with cork on a high-frequency oven, changes itself into a completely inert polymer with no toxicity. The global migration, the TDI specific migration, sensorial and taste analysis show that this product becomes a toxicity-free polymer, being suitable for food contact applications.

**Glue** The glue for the cork veneer is a solvent-free composition based on an aqueous copolymer emulsion of synthetic resins. It is applied with a roller coating machine on the back of the cork veneer. Gluing is achieved by applying pressure to the veneer against the cork agglomerated backing on a hot plate press. This product provides a flexible adhesive film with high cohesion, thermal stability and bond strength after drying.

<b>Glue Specifications</b>	<i>Base:</i>	Synthetic resins
	<i>Viscosity:</i>	25 P (Brookfield RVT 3.10.25°C)
	<i>Density:</i>	1.32 (20°C - DIN 53217)

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**Pigmentation** Ink-based nitro-cellulose with pigment (titanium dioxide) in a blend of alcohol-based solvents. Applied with a roller coating machine and dried in a hot tunnel.

After evaporation of the solvent, the resulting film has resistance to oils, greases and water. When dried, this product is odor-free and gives high opacity and color intensity. This product is free of formaldehyde and phenols.

<b>Pigmentation Specifications</b>	<b>Base:</b>	Nitro-cellulose
	<b>Viscosity @ 20°C:</b>	20 seconds (cup a DIN 53211)
	<b>Density (20°C):</b>	1.02 DIN 53217
	<b>Solid content:</b>	30%

**Varnish** Acrylic UV-cured varnish (gloss or matte) developed for sealing cork floor tiles. Applied on reverse with a roller machine and dried in a UV tunnel at 10m /min with two 80 W/cm lamps. Normally applied in three layers.

The varnish exhibits good flexibility and high wear resistance, as well as resistance to the usual solvents, detergents and chemical solutions.

<b>Varnish Specifications</b>	<b>Base:</b>	Acrylic-urethane resins
	<b>Viscosity @ 20°C:</b>	Gloss: 25 Poise
		Matte: 5 Poise
	<b>Density:</b>	1.1g/cm <sup>3</sup>
	<b>Solid content:</b>	100%
<b>Wear resistance:</b>	3mg/100 cycles (Taber CS-17 with 2.2 lb. load)	