Kontain GCL Standard

Needle-punched sodium-bentonite liner

A needle-punched liner for containment, combining natural sodium bentonite with a nonwoven cover and woven carrier.

The standard granular grade contains at least 3,700 g/m² dry bentonite.

Dry bentonite	≥3,700 g/m²
Construction	PP nonwoven / bentonite / PP woven
Long edges	Factory-treated, self-sealing under confinement

Technical properties

Property	Test method	Value
Dry bentonite mass	ASTM D5993	≥3,700 g/m²
Unmodified natural sodium bentonite swell	ASTM D5890; reagent water	≥24 mL/2 g
Fluid loss	ASTM D5891	≤18 mL
Tensile strength, MD / cross direction	ASTM D6768	≥10 / ≥10 kN/m
Peel strength	ASTM D6496	≥600 N/m
Static puncture	EN ISO 12236 / ASTM D6241	≥1,800 N
Hydraulic conductivity		≤5.0×10^{-11} m/s
Hydrated peak internal shear at 10 kPa normal stress	ASTM D6243	≥30 kPa

Data basis

Properties apply to the standard granular construction. Swell index is measured on the unmodified natural sodium bentonite.

Application limits

Select for the contact liquid, confinement and site conditions. Peak internal shear is not a residual design strength or an interface-friction value.