

## PRODUCT DATA SHEET

### COLETANCHE ES 4

#### DESCRIPTION

→ COLETANCHE ES 4 is an SBS elastomeric modified bituminous geomembrane.

#### USE

→ Extreme level of mechanical resistance, for use as environmental protection and droungworks waterproofing (aggressive materials, reinforced precautions), in particular :

- Railways, directly under ballast,
- Dams,
- Confinement of radioactive waste.

Product use must be validated by Axter.

#### APPLICATION METHOD

→ Torched

#### STORAGE

→ Rolls must not be stored directly on the ground. They must be laid supported on concrete blocks, trestles or timber beams) min 35 cm height, placed under the mandrel ends.

#### COMPOSITION

(indicative)

Reinforcement (g/m <sup>2</sup> ) :	Glass mat	50
Reinforcement (g/m <sup>2</sup> ) :	Non-woven geotextile	400
Binder (g/m <sup>2</sup> ) :	Elastomeric SBS	5400
Surface finish (g/m <sup>2</sup> ) :	Sand	200
Under surface finish (g/m <sup>2</sup> ) :	Polyester antirroot film	15

#### CHARACTERISTICS

	STANDARD	UNITS	VALUES	Tolerance	
				Min	Max
Dimensions	ASTM	Length	54	≥	
		Width	5.01	≥	
Thickness (on finished product)	ASTM D 5199	mm	5.60	5.32	6.16
Surface mass	ASTM D 3776	kg/m <sup>2</sup>	6.40	6.10	7.00
Resistance to tearing	ASTM D 4073	Longitudinal	1225	919	
		Cross direction	1025	769	
Tensile properties : maximum tensile strength	ASTM D 4595	Longitudinal	32	24	
		Cross direction	28	21	
Tensile properties : elongation	ASTM D 4595	Longitudinal	90	60	
		Cross direction	90	60	
Static Puncture	ASTM D 4833	N	650	585	
Flexibility at low temperature	ASTM D 5147	Surface	-20		
		Under surface	-20		
Water permeability (liquid tightness)	ASTM E 96	m/s	> 2.10 <sup>-14</sup>		
Gas permeability (gas tightness)	ASTM D 1434	cm <sup>3</sup> /(m <sup>2</sup> .24h/atm)	<137		

The manufacturer reserves the right to modify, at any time, the characteristics of its products.

