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## PRODUCT DATA SHEET CURLEX® BLOC

## DESCRIPTION

Curlex Blocs consists of a specific cut of naturally seed free, nontoxic Great Lakes Aspen wood excelsior with 80% of the fibers  $\geq 6$  inches in length inside a durable, flexible, tubular containment material. Biodegradable or synthetic tubular containment material is available depending on your needs. Curlex Bloc shall be manufactured in the U.S.A. with components native to North America.

## PHYSICAL PROPERTIES

Curlex Bloc measurements at time of manufacturing:

	Product Name	Curlex Bloc	Curlex Bloc HD
	Nominal Dimensions	18 in x 16 in	18 in x 16 in
		(45.7 cm x 40.6 cm)	(45.7 cm x 40.6 cm)
	Length	4.0 ft or 8.0 ft	4.0 ft or 8.0 ft
	(+ 10%, -0%)	(1.2 m or 2.4 m)	(1.2 m or 2.4 m)
	Unit Weight <sup>a</sup>	14.0 lb/ft	18.0 lb/ft
	$(\pm 10\%)$	(20.8 kg/m)	(26.8 kg/m)
	Unit Ground Contact	192 in <sup>2</sup> /ft	192 in <sup>2</sup> /ft
	(minimum)	$(4,064.0 \text{ cm}^2/\text{m})$	$(4,064.0 \text{ cm}^2/\text{m})$
	Density <sup>a</sup>	7.0 lb/ft <sup>3</sup>	9.0 lb/ft <sup>3</sup>
	$(\pm 10\%)$	$(112.1 \text{ kg/m}^3)$	$(144.1 \text{ kg/m}^3)$
	Containment Material <sup>b</sup>	Synthetic or Biodegradable	Synthetic or Biodegradable

## **CURLEX BLOC PERFORMANCE REQUIREMENTS**

Property	Value	Method
Flow Rate	$\geq$ 35 GPM/ft <sup>2</sup>	ASTM D5141
Slope Soil Loss Reduction (%)	$\geq$ 68%	Quantified research <sup>c</sup>
pH Buffering	$8\pm3$	ASTM D1117, modified
Functional Longevity <sup>d</sup>	$\leq$ 36 months	Documented laboratory and field studies
Removal of Polynuclear		
Aromatic Hydrocarbons (PAHs)	$\geq$ 95%	Quantified research <sup>e</sup>
Fly Ash Filtration (TSS)	$\geq$ 95	Quantified research <sup>f</sup>
Fly Ash Filtration (NTU)	$\geq 88$	Quantified research <sup>f</sup>

<sup>a</sup> Weight and density are based on a dry fiber weight basis at time of manufacture. Baseline moisture content of Great Lakes Aspen excelsior is 22%.

<sup>b</sup> The optional biodegradable containment material is designed to start degrading during the first year to allow voluntary seed and sediment into the Curlex fiber matrix. The matrix of the Curlex Bloc is the key to the product's performance capabilities. The containment material is a carrier to assist with product shipping and placement into the field.

<sup>c</sup> Kelsey, K., T. Johnson, and R. Vavra. 2006. "Needed Information: Testing, Analyses, and Performance Values for Slope Interruption and Perimeter Control BMPs." IECA Conference Proceedings. P. 171-181.

<sup>d</sup> Functional longevity varies from region to region because of differences in climatic conditions.

<sup>e</sup> Boving and Zhang, Chemosphere 54 (2004) 831-839.

<sup>f</sup> Kelsey, K. and M. Murley. (2017, January). Fly Ash Slurry Filtration Using Curlex<sup>®</sup> Sediment Log<sup>®</sup> - Quantifying Total Suspended Solids and Turbidity Reduction. Unpublished internal document, ErosionLab.

