# DURA'SKRIM® RB20BBV

SCRIM REINFORCED POLYETHYLENE GAS BARRIER

# **Viaflex**

### PRODUCT DESCRIPTION

DURA SKRIM® RB20BBV incorporates high-strength reinforcement with the latest in EVOH barrier technology designed to provide an effective barrier to odor and gases. RB20BBV is manufactured with an outer ply consisting of seven-layers including an integrated core of a high performance polymer with enhanced barrier properties. This limits migration of volatile organic compounds including methane, halogenated hydrocarbons, aromatic hydrocarbons and odors. The barrier layer is more effective than standard polyethylene in gas and odor control, while providing the same great strength and toughness expected from patented DURA SKRIM® fiber-reinforced membranes. Diagonal scrim reinforcement is placed between these plies to provide optimal tear resistance and increased service life.

DURA SKRIM® RB20BBV is manufactured in large prefabricated panels to provide maximum coverage and reduce site installation time and cost (fabricated panels available up to 8,000 lbs).

### **PRODUCT USE**

DURA♦SKRIM® RB20BBV is designed for use in interim and temporary landfill rainshed covers to control leachate, methane and odors. RB20BBV is also recommended for applications that demand high puncture resistance, excellent barrier properties, and exceptional outdoor life. DURA+SKRIM® RB20BBV is manufactured from very chemical-resistant, virgin polymers.

#### SIZE & PACKAGING

DURA SKRIM® RB20BBV is available in a variety of widths and lengths in large prefabricated panels up to 8,000 lbs. All panels are accordion folded and tightly rolled on a heavy-duty core for ease of handling and time-saving installation. DURA SKRIM® RB20BBV is also available in custom thicknesses ranging from 6 to 20 mil with minimum purchase requirements.





Landfill Odor Control Barrier Cover

PRODUCT	PART #
DURA ♦ SKRIM	. RB20BBV

## **APPLICATIONS**

Landfill Odor Control	Earthen Barrier Liners
Modular Tank Liners	Interim Landfill Caps
Brownfield Liners	Remediation liners & Covers
Remediation Liners	Erosion Control Covers

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#### SCRIM REINFORCED POLYETHYLENE GAS BARRIER

PRO-FORMA DATA SHEET - TYPICAL PROPERTIES			DURA♦SKRIM® RB20BBV			
		IMPERIAL		METRIC		
PROPERTIES	TEST METHOD	MINIMUM	TYPICAL	MINIMUM	TYPICAL	
Appearance		Black/Black				
<sup>1</sup> Thickness, Average	ASTM D5199 Procedure A	20 mil	22 mil	0.51 mm	0.56 mm	
Weight	ASTM D751	70 lbs/MSF	74 lbs/MSF	341 g/m <sup>2</sup>	361 g/m <sup>2</sup>	
Construction		Extrusion laminated with scrim reinforcement				
<sup>2</sup> Grab Tensile Strength	ASTM D7004	82.4 lbs	115 lbs	366 N	512 N	
<sup>2</sup> Grab Tensile Elongation	ASTM D7004	15 %	17 %	15 %	17 %	
<sup>3</sup> Tongue Tear	ASTM D5884	45 lbs	48 lbs	200 N	213 N	
CBR Puncture Resistance	ASTM D6241	320 lbs	359 lbs	1422 N	1596 N	
Mullen Burst	ASTM D751	150 psi	176 psi	1034 kPa	1213 kPa	
High Pressure OIT	ASTM D5885	1000 min	3100 min	1000 min	3100 min	
WVTR	ASTM E96	0.009 grains/ft <sup>2</sup> •hr 0.151 grains/m <sup>2</sup> •day				
Perm Rating	ASTM E96	0.023 Perms 0.015 g/m <sup>2</sup> •day•mm Hg				
Hydraulic Conductivity	ASTM E96		1.77 x 10 <sup>-10</sup> cm/sec			
Benzene Permeance	See Note <sup>6</sup>		$6.80 \times 10^{-11} \text{ m}^2/\text{sec}$ or $6.03 \times 10^{-13} \text{ m/s}$			
Toluene Permeance	See Note <sup>6</sup>	$9.45 \times 10^{-11} \text{ m}^2/\text{sec}$ or $2.43 \times 10^{-13} \text{ m/s}$				
Ethylbenzene Permeance	See Note <sup>6</sup>	7.41 x $10^{-11}$ m <sup>2</sup> /sec or 5.57 x $10^{14}$ m/s				
M & P-Xylenes Permeance	See Note <sup>6</sup>		$6.99 \times 10^{-11} \text{ m}^2/\text{sec}$ or $6.35 \times 10^{-14} \text{ m/s}$			
O-Xylene Permeance	See Note <sup>6</sup>		6.61 x 10 <sup>-11</sup> m <sup>2</sup> /sec or 5.71 x 10 <sup>-14</sup> m/s			
Trichloroethylene (TCE)	See Note <sup>6</sup>	$4.60 \times 10^{-11} \text{ m}^2/\text{sec}$ or $1.75 \times 10^{-14} \text{ m/s}$				
Perchloroethylene (PCE)	See Note <sup>6</sup>		$4.33 \times 10^{-11} \text{ m}^2/\text{sec}$ or $1.74 \times 10^{-14} \text{ m/s}$			
Maximum Static Use Temperature		180° F 82° C				
Minimum Static Use Temperature		-70° F -57° C				
Thickness measured over top of skrim						

<sup>1</sup> Thickness measured over top of skrim. <sup>2</sup> Tests are an average of primary reinforcement directions.

<sup>3</sup> Tests are an average of machine and transverse directions.

<sup>6</sup> Aqueous Phase Film Permeance.

Permeation of Volatile Organic Compounds through EVOH Thin Film Membranes and Coextruded LLDPE/EVOH/LLDPE Geomembranes, McWatters and Rowe, Journal of Geotechnical and Geoenvironmental Engineering © ASC/September 2015. (Permeation is the Permeation Coefficient adjusted to actual film thickness - calculated at 1 kg/m<sup>3</sup>.) The study used to determine PCE and TCE is titled: Evaluation of diffusion of PCE & TCE through high performance geomembranes by Di Battista and Rowe, Queens University 8 Feb 2018.

## DURA-SKRIM®

PRO-FORMA SHEET CONTENTS: The data listed in the Pro-Forma data sheet is representative of initial production runs. These values may be revised at anytime without notice as additional test data becomes available.

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Note: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance, odor transmission, longevity as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. VIAFLEX MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage. Limited Warranty available at www.viaflex.com

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