

## PRODUCT DESCRIPTION

DURA♦SKRIM® NB45BT is an advanced flexible barrier geomembrane, reinforced with a closely knit 9x9 weft inserted polyester scrim fully encapsulated between two-layers of highly UV stabilized linear low density polyethylene. NB-Series incorporates high-strength reinforcement with the latest barrier technology designed to provide an effective chemical barrier to VOCs, odors and gases. NB45BT 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.

DURA♦SKRIM® NB45BT is black on one side and tan on the other for added versatility and 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).

Exceptional toughness, high tensile and puncture strength is achieved with the combination of premium high strength LLDPE and dense scrim reinforcement. A highly stabilized formulation consisting of antioxidants and UV stabilizers provide excellent protection for long-term exposed or barrier applications.

## PRODUCT USE

DURA♦SKRIM® NB45BT is used in applications that require exceptional outdoor life and long-term performance. Applications requiring high tear properties, exceptional tensile strength and puncture resistance, along with effective barrier properties utilize NB45BT to meet these demands. DURA♦SKRIM® NB-Series meets the physical property values as stated in GRI test method GM25 and is manufactured from a chemical-resistant, linear-low-density polyethylene with excellent cold crack performance and resistance to thermal expansion.

## SIZE & PACKAGING

DURA♦SKRIM® NB45BT is available in a variety of widths and lengths to meet the project requirements. Large diameter mill rolls are available to assure an efficient seaming process. Factory welded panels are produced in a controlled environment and are accordion folded and tightly rolled on a heavy-duty core for ease of handling and time saving installation.



Secondary Containment Application

## PRODUCT

## PART #

DURA♦SKRIM ..... NB45BT

## APPLICATIONS

- |                        |                             |
|------------------------|-----------------------------|
| Waste Lagoon Liners    | Secondary Containment       |
| Floating Covers        | Landfill Caps               |
| Landfill Odor Control  | Erosion Control Covers      |
| Brownfield Liners      | Modular Tank Liners         |
| Earthen Barrier Liners | Remediation Liners & Covers |
| Heap Leach Liners      | Crude Oil Storage           |

# DURA♦SKRIM®

# DURA♦SKRIM® NB45BT

SCRIM REINFORCED POLYETHYLENE VOC GAS BARRIER

## PRO-FORMA DATA SHEET

		DURA♦SKRIM® NB45BT			
		IMPERIAL		METRIC	
PROPERTIES	TEST METHOD	MINIMUM	TYPICAL	MINIMUM	TYPICAL
APPEARANCE		Black		Tan	
CORE THICKNESS	ASTM D5199	40 mil	45 mil	1.02 mm	1.14 mm
WEIGHT	ASTM D751	189 lbf/msf	213 lbf/msf	923 g/m <sup>2</sup>	1040 g/m <sup>2</sup>
CONSTRUCTION		9x9-1000 Denier PET scrim reinforced polyethylene			
TONGUE TEAR STRENGTH	ASTM D5884	100 lbf	135 lbf	445 N	601 N
GRAB TENSILE AT BREAK	ASTM D7004	275 lbf	350 lbf	1223 N	1557 N
TENSILE ELONGATION AT BREAK	ASTM D7004	22 %	30 %	22 %	30 %
PUNCTURE RESISTANCE	ASTM D4833	90 lbf	125 lbf	400 N	556 N
STANDARD OIT OR HIGH PRESSURE HPOIT	ASTM D3895 ASTM D5885	100 min 400 min	150 min 2400 min	100 min 400 min	150 min 2400 min
HYDRAULIC CONDUCTIVITY		1.47 x 10 <sup>-10</sup> cm/sec			
BENZENE PERMEANCE	See Note <sup>6</sup>	2.27 x 10 <sup>-10</sup> m <sup>2</sup> /sec or 1.81 x 10 <sup>-13</sup> m/s			
TOLUENE PERMEANCE	See Note <sup>6</sup>	3.15 x 10 <sup>-10</sup> m <sup>2</sup> /sec or 7.28 x 10 <sup>-14</sup> m/s			
ETHYLBENZENE PERMEANCE	See Note <sup>6</sup>	2.47 x 10 <sup>-10</sup> m <sup>2</sup> /sec or 1.67 x 10 <sup>-14</sup> m/s			
M & P-XYLENES PERMEANCE	See Note <sup>6</sup>	2.33 x 10 <sup>-10</sup> m <sup>2</sup> /sec or 1.91 x 10 <sup>-14</sup> m/s			
O-XYLENE PERMEANCE	See Note <sup>6</sup>	2.20 x 10 <sup>-10</sup> m <sup>2</sup> /sec or 1.71 x 10 <sup>-14</sup> m/s			
METHANE PERMEANCE	ASTM D1434	< 3.70E <sup>-13</sup> m/s			
HYDROGEN SULFIDE	See Note <sup>9</sup>	1.09E <sup>-09</sup> m/s			
TRICHLOROETHYLENE (TCE)	See Note <sup>6</sup>	1.53 x 10 <sup>-10</sup> m <sup>2</sup> /sec or 5.25 x 10 <sup>-15</sup> m/s			
PERCHLOROETHYLENE (PCE)	See Note <sup>6</sup>	1.44 x 10 <sup>-10</sup> m <sup>2</sup> /sec or 5.22 x 10 <sup>-15</sup> m/s			
MAXIMUM STATIC USE TEMPERATURE		180° F		82° C	
MINIMUM STATIC USE TEMPERATURE		-70° F		-57° C	

<sup>2</sup> Tests are an average of primary reinforcement directions.  
<sup>6</sup> Aqueous Phase Film Permeance.

## 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.



Scan QR Code to download technical data sheets.

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](http://www.viaflex.com)

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