# GEO BARRIER® xb60bcl

HDPF TEXTURED GAS BARRIER - FORMULATED FOR EXPOSED APPLICATIONS

# PRODUCT DESCRIPTION

GEO Barrier® XB60BCL is a seven layer co-extruded geomembrane consisting of durable high-density polyethylene (HDPE) and an inner core of highly effective barrier resin, designed specifically as a barrier against methane, radon, landfill odors, and VOCs. High strength HDPE provides excellent chemical resistance and outdoor durability. A robust stabilization package that exceeds the industry standard; provides long-term protection from thermal oxidation and ultraviolet degradation in exposed applications. The aggressive surface texture provides excellent stabilization for earthen and secondary geosynthetics as well as work site safety.

### PRODUCT USE

GEO Barrier® XB60BCL is formulated to effectively stop gas vapor and odor migration in long-term outdoor cover, containment, and capping applications. XB60BCL has been specifically designed to perform in the municipal solid waste industry as landfill covers, caps and impoundment containment covers.

GEO Barrier® XB60BCL is an effective temporary and long term landfill cap and is less permeable to VOCs than standard 80 mil HDPE geomembranes. Contaminants found in leachate and landfill gas in municipal and hazardous waste landfills can migrate through standard HDPE contributing to both atmospheric and groundwater contaminations.

GEO Barrier® XB60BCL provides an effective barrier to a wide range of VOCs including benzene, toluene, ethylbenzene, o-xylene and many others.

# SIZE & PACKAGING

GEO Barrier® is available in 16' wide layflat in various roll lengths. All panels are tightly rolled onto a heavy-duty core for ease of handling and time saving installation. GEO Barrier® geomembranes are black or can be manufactured in other custom colors with minimum quantity order requirements.



Landfill Odor Control Barrier

#### **PRODUCT**

PART #

GEO BARRIER® ......XB60BCL

# **APPLICATIONS**

Landfill Odor Control Barrier

Landfill Covers & Caps

Floating Covers

Underslab VOC Barrier

Remediation Cover / Liner Leachate Collection Ponds

**Brownfield Barriers** 

Impoundment Covers



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PRO-FORMA DATA SHEET - TYPICAL VALUES		GEO BARRIER <sup>®</sup> XB60BCL	
PROPERTIES	TEST METHOD	IMPERIAL	METRIC
WEIGHT		260 lbs/msf	1269 g/m²
THICKNESS, NOMINAL	ASTM D5994	60 mils	1.5 mm
ASPERITY HEIGHT (PER SIDE)	ASTM D7466	>15 mil	> 0.4 mm
Density	ASTM D792 or ASTM D1505	0.94 g/cm3 (minimum)	
<sup>3</sup> TENSILE STRENGTH	ASTM D638/D6693 1. Tensile Strength at Break 2. % Elongation at Break	174 lbf/in 380 %	30.5 N/mm 380 %
OXIDATIVE INDUCTION TIME (OIT)	ASTM D3895 Method A	> 100 min.	
HIGH PRESSURE OIT (HPOIT)	ASTM D5885	> 400 min.	
Puncture Resistance	ASTM D4833	144 lbf	641 N
<sup>3</sup> Tear Resistance	ASTM D1004	55 lbf	245 N
STRESS CRACK RESISTANCE	ASTM D5397	> 1800 hrs	
LOW TEMP, IMPACT FAILURE TEMP	ASTM D746 Method B	Pass, 5 min @ -40°F	
BENZENE PERMEANCE	See Note <sup>6</sup>	3.43E-09 m/s	
TOLUENE PERMEANCE	See Note <sup>6</sup>	6.51E-09 m/s	
ETHYLBENZENE PERMEANCE	See Note <sup>6</sup>	1.21E-08 m/s	
M & P-Xylenes Permeance	See Note <sup>6</sup>	1.31E-08 m/s	
O-Xylene Permeance	See Note <sup>6</sup>	1.08E-08 m/s	
CARBON BLACK DISPERSION	ASTM D5596	Pass - See Note <sup>1</sup>	
CARBON BLACK %	ASTM D1603 or D4218	> 2.0 %	
MAXIMUM STATIC USE TEMPERATURE		180° F	82° C

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

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. GeoCHEM, Inc. 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.

GeoCHEM, INC. / Engineered Films Division
Sales & Procurement Center - Phone No. (907) 562-5755 ~ Fax No. 206.219.3740
WA State Sales - Phone No. (206) 774.8777 ~ Toll Free: 1 (800) 490.5320
GeoCHEM Website: http://www.geocheminc.com

Contact Us: http://www.geocheminc.com/contactus.php



Aqueous Phase Film Permeance.
Diffusive Transport of VOCs through LLDPE and Two Coextruded Geomembranes,
McWatters and Rowe, Journal of Geotechnical and Geoenvironmental Engineering®
ASCE/September 2010. (Permeation is the Permeation Coefficient adjusted to actual film thickness)