

CE-299
10/13 Supersedes 08/11

ACROLINE[®] HDPE Sheet Liner

DESCRIPTION

ACROLINE HDPE Sheet Liner is a high density polyethylene thermoplastic semi-finished sheet liner available in different thicknesses, which is welded or fused together to form an impervious sheet barrier of unlimited size and area as required. ACROLINE HDPE Sheet Liner systems provide a chemical-resistant, leak-tight barrier to contain environmentally hazardous chemistry and fluids from subsoil infiltration. The high elongation of the ACROLINE HDPE Sheet Liner allows the liner to resist minor movement in the soil substrate.

ACROLINE HDPE Sheet Liner is available in a variety of thicknesses ranging from 30 to 100 mils (0.75 mm - 2.5 mm). ACROLINE HDPE Sheet Liner is compounded from high-density polyethylene (HDPE), chemistry and is 100% PVC free.

ACROLINE HDPE Sheet Liner should be designed for use by a consulting engineer versed in the detail of groundwater protection systems. The system should be installed onto suitably prepared substrates by contractors knowledgeable in handling, laying and welding sheet liners. **Consult Corrosion Engineering for project-specific fabricator and installer recommendations.**

AREAS OF USE

- Loose laid liners for secondary containment in concrete dikes and basins
- Exterior protective barrier for concrete slabs, vaults, pits and sumps
- For use in combination with ACROLINE HDPE Systems anchored liner systems

OUTSTANDING FEATURES

- Manufactured in a single extrusion process insuring uniform thickness
- Tough and durable - enhanced puncture resistance
- A variety of thicknesses readily available
- Easily welded in field
- Broad chemical resistance.
- Long design life
- Repairable

TYPICAL PHYSICAL PROPERTIES

Property (60 mil 0.060" 1.5 mm) sheet	Test Method	Value
Density, g/cc, minimum	ASTM D792, Method B	0.94
Tensile Properties (avg both directions)	ASTM D6693, Type IV	
Strength @ Yield (min avg) lb/in width (N/mm)	2 in/minute	132 (23.1)
Elongation @ Yield (min avg) % (GL=1.3in)	5 specimens in each direction	13
Strength @ Break (min avg) lb/in width (N/mm)		240 (42)
Elongation @ Break (min avg) % (GI=2.0 in)		700
Tear Resistance (min avg) lbs. (N)	ASTM D1004	45 (200)
Puncture Resistance (min avg) lbs. (N)	ASTM D4833	120 (534)
Carbon Black Content (range in %)	ASTM D4218	2 – 3
Stress Crack Resistance (Single Point NCTL), hrs	ASTM D5397	300
Oxidative Induction Time, minutes	ASTM D3895, 200°C, 1 atm O ₂	≥100
Melt Flow Index, g/10 minutes	ASTM D1238, 190°C, 2.16kg	≤1.0
Oven Aging with HP OIT, (% retained after 90 days)	ASTM D5721 ASTM D5885, 150°C, 500 psi O ₂	80
UV Resistance with HP PIT, (% retained 1600 hrs)	ASTM D5885 150°C, 500psi O ₂ GRI GM11 20hr. cycle @ 75°C 4hr. dark condensation @ 60°C	50

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

ACROLINE HDPE Sheet is available in standard roll dimensions of 23' (7.0 m). The length of the roll will vary according to thickness.

Thickness		Width		Length		Area (approx)		Weight (Avg.)	
mil	mm	ft	m	ft	m	ft ²	m ²	lbs	kg
30	.75	23	7	1040	317	23,920	2,222	3,900	1,770
40	1.0	23	7	835	254	19,205	1,784	3,900	1,770
60	1.5	23	7	540	165	12,420	1,154	3,900	1,770
80	2.0	23	7	415	126	9,545	887	3,900	1,770
100	2.5	23	7	335	102	7,705	716	3,900	1,770

Note: ACROLINE HDPE Sheet Liner should be installed on suitably prepared substrates by contractors knowledgeable in the handling, laying and welding of sheet liners. **Consult Corrosion Engineering for project-specific fabricator and installer recommendations.**

SAFETY PRECAUTIONS / DISCLAIMER

Mixes and applications of this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and [material safety data sheets](#) before using. While all statements, technical information, and recommendations contained herein are based on information our company believes to be reliable, nothing contained herein shall constitute any warranty, express or implied, with respect to the products and/or services described herein and any such warranties are expressly disclaimed. We recommend that the prospective purchaser or user independently determine the suitability of our product(s) for their intended use. No statement, information or recommendation with respect to our products, whether contained herein or otherwise communicated, shall be legally binding upon us unless expressly set forth in a written agreement between us and the purchaser/user.



Corrosion Engineering | 300 Stevens Drive, Suite 310, Lester, PA 19113
 +1-610-833-4001 Phone | +1-610-833-3040 Fax | corrosion-engineering.com