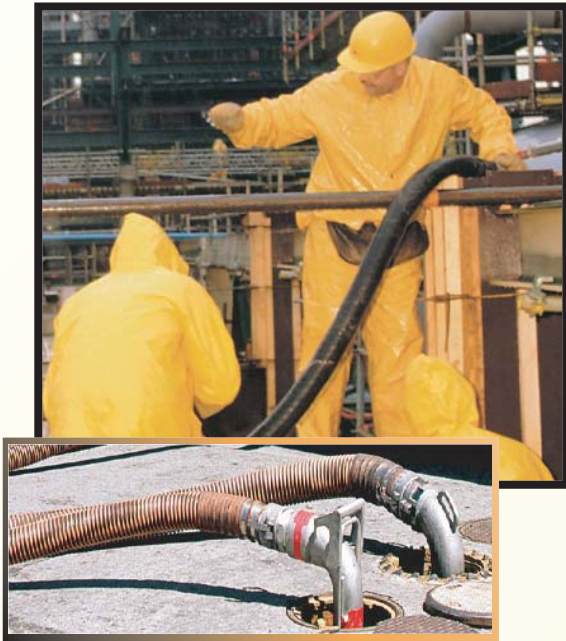


Coolshield™ PVDF Membrane

Cooley Engineered Membranes is pleased to introduce Cooley Coolshield™ PVDF Membrane, a new brand of Fluoropolymer membrane which utilizes our unique PVDF* formulation. Coolshield™ PVDF was engineered for use in the Chemical, Safety, Medical and Food Industries.



Cooley Coolshield™ PVDF Membrane:

- ▶ Meets FDA requirements (FDA No. 21 CFR 177.2510)
- ▶ Meets Dairy Industry 3A sanitary standards
- ▶ Chemical Resistant
- ▶ Non-Flammable
- ▶ U.V. Protection
- ▶ Excellent outdoor service life
- ▶ Excellent stability against harsh chemicals
- ▶ Excellent operating temperatures, (330°F intermittent, 300°F continuous)

*PVDF is a fluorinated, semi-crystalline thermoplastic polymer obtained by radical polymerization of vinylidene fluoride.

General Synthetic Membrane Properties

	Max Operating Temperature ° C	Acids	Alkalis	Oxidizing Agent	Hydrolysis
Polypropylene	95	E	E	P	F
Polyethylene	85	E	E	P	F
Polyester	100	G	F	F	P
Polyamide	100	P	G	P	P
PVC	80	G	G	F	G
Coolshield™	150	E	E	G	E
PTFE	150+	E	E	E	E

E = Excellent G = Good F = Fair P = Poor

Coolshield™ PVDF

1.0 STYLE

2.0 BASE FABRIC	Polyester		ASTM	Fed.Std	
2.1 WEIGHT	2.23	oz/yd2	Min	191A	75.6 g/m2
2.2 FIBER			1000d - Knit		
FABRIC STYLE					

3.0 COATED FABRIC

3.1 TOTAL WEIGHT	12	oz/yd2			406.8 g/m2
	1 +/-	oz/yd2		+/-	33.9 g/m2
3.2 GAUGE		in.			0.000 cm.
		+/- in.		+/-	0.000 cm.
3.3 TYPE OF COATING	PVDF				
3.4 COATING DISTRIBUTION	50/50				
3.5 WIDTH	61	in.			154.9 cm.
	1.0 +/-	in.		+/-	2.54 cm.

4.0 MECHANICAL PROPERTIES

4.1 TENSILE STRENGTH					
GRAB - WARP	200	lbs.	D751-A		89 daN
GRAB - FILL	165	lbs.	D751-A	5100	73 daN
1" STRIP - WARP	90	lbs/in.	D751-B		80 daN/5cm
1" STRIP -FILL	90	lbs/in.	D751-B	5102	80 daN/5cm
4.2 ADHESION - R.F	8.0	lbs/in.	D751		7.1 daN/5cm
4.3 ADHESION - THERMAL	5.0	lbs/in.	D751		4.5 daN/5cm
4.4 TEAR STRENGTH					
TONGUE WARP	60	lbs.	D751-B	5134	27 daN
TONGUE FILL	55	lbs.	D751-B	5134	24 daN
4.5 LOW TEMP	-85	°F	D2136		-65 °C
4.6 HIGH TEMP					
CONTINUOUS	300	°F	D1204		149 °C
INTERMITTENT	330	°F	D1204		166 °C
4.7 ABRASION RESISTANCE (TABER, FACE)	275	cycles	D3384	5306	275 cycles
TO EXPOSED FABRIC (WHEEL H18, 1,000 g load)		g/cy	D3384	5306	0 g/cy
WEIGHT LOSS					
4.8 PUNCTURE				5306	
SCREWDRIVER	50	lbs.	D751Mod.		22 daN
BALL	350	lbs.	D751		156 daN
4.9 HYDRO RESISTANCE	250	psi	D751-A		1.15E+06 Pa
4.10 FLAME RESISTANCE					
TIME OF AFTERFLAME (MAX)		sec			0 sec
LENGTH OF CHAR(MAX)		in.			0 cm.
COMMENTS					

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