SSL 879 TechLite®

Description
The TechLite® insulation system is an innovative, patented, non-fibrous, lightweight foam that is factory jacketed with a glossy semi-rigid PVC covering. It has a wide service temperature range, low smoke and flame spread characteristics and is manufactured in 4' tube lengths and in sheets.

Applications
TechLite® SSL 879 insulation is perfect for a variety of applications including food processing, dairy, clean room, and other applications where cleanliness and sanitary conditions are important. This product features a self-sealing adhesive strip along the longitudinal seam for installation. Colors are available upon request.

Table 1: Foam Technical Data

Property	Test Method	Value
Flexible open-cell melamine	ASTM C-1410	
Service temperature	ASTM C-1410	-40°F to 350°F
In service temp min-max limits		-150°F to 400°F
Density [lb/ft^3]	ASTM D-3574	0.56 ±0.06
Thermal Conductivity, k [Btu·in/h·ft^2·°F]	ASTM C-177	0.19 at -40°F mean
		0.26 at 75°F mean
		0.45 at 300°F mean
Indentation force deflection, min [lb 50 in^2]	ASTM D-3574	
Compression at 25%		80
Compression at 65%		160
Tensile Strength min [lb/in^2]	ASTM D-3574	14
Percent Elongation, max	ASTM D-3574	30
Surface burning characteristics, max		
Flame spread index smoke development at 1in thick	ASTM E-84	25/50
Oxygen Index, minimum % oxygen	ASTM D-2863	33
National Fire Protection Association No. 101		Class A
Uniform Building Code 1988 Part VII sec 4201-4203		Class 1
ASTM C-871		Passes
ASTM C-795		Passes
NRC Guide 1.36, Section C, Para 2 (b)		Passes
Boeing Specification, BSS 7239		Meets and Exceeds
Airbus Industries Specification	ATS-1000.001	Meets and Exceeds

Jacket Technical Data
800 series jacketing is made semi-rigid white PVC. It has a shiny, hard surface that resists accumulation of foreign material that may contaminate sanitary processes. The total thickness is 0.020 inches. It is washable and never needs painting. Common colors are white, grey, black and blue. Red, orange, yellow, green and brown are also available. USDA Approved.

Table 2: Jacket Technical Data

Property	Test Method	Value
Ambient temperature range		0°F to 140°F
Total weight [oz/yd^2]		28
Cold crack		0°F
Tensile Strength		1600 psi
Fire hazard classification	ASTM E-84	25/50

Fittings
Rigid PVC fittings covers are supplied with pre-formed TechLite® inserts or diapers. Sheet Stock Material is available in sheet form for tanks and duct work in sizes up to 48" x 96" in thickness from ½" to 3" in ½ inch increments. Other thicknesses are available upon request.

Accessories
Fastener Weld Glue is required to solvent weld all seams.
Factory approved silicone sealant is required to seal any large gaps and to insulate jacket edges from hot surfaces.

Storage
Cartons are not intended for outdoor storage. Protect from rain and other abuse.

Preparation
Apply only to clean, dry surfaces.

General Application
All exposed pipe surfaces must be covered with sufficient insulation. No gaps or thin areas on fittings should be allowed. Seal all seams and covers with Fastener Weld and/or factory approved silicone sealant. Any exposed insulation must be covered with PVC such as end caps or flange covers. Cold systems must have a continuous vapor barrier maintained. Vapor retarder mastic (CP-70 or equal) should be applied every 12ft to butt ends of insulation. Hot systems must be sized to keep the jacket temperature below the softening point of the PVC (approx. 159°F). Keep the jacket temperature below 125°F if at all possible for best performance.

**SSL 879
Submittal Sheet**

Effective 01/01/2011

Insulation for pipes, tanks and vessels available in pre-formed or sheet varieties.

Sizes available to fit IPS, CTS and SS tubing sizes. Custom OD and ID sizes optional upon request.

Pipe sizes from ¼" to 12" in preformed 4' sections. All sections have 2" overlapping SSL flaps longitudinally with a 2" jacket overlap circumferentially on one end.

Larger pipe OD's and tanks are covered in V-grooved sections of 4' length. All sections have 2" overlapping SSL flaps longitudinally with a 2" jacket overlap circumferentially on one end.

Pipe Size and Type (IPS, CTS, SST etc.)

_____

Insulation Thickness

_____

Jacket Color/Type

_____

Approved by:

x_____

Date

_____

Outdoor Applications
TechLite® 879 series jacketing is not intended for outdoor use except for special circumstances. Please consult factory for additional information.

Tanks and Vessels
Tanks and vessels can be covered in sheets that are cut and trimmed on site to conform to the object. Alternately, ASJ covered TechLite® foam may be applied to complicated shapes and then covered with 800 series jacket or mastic in a second step. Semi-rigid PVC molded end caps and rolled corners are available as special order from the factory.

Table 3: Recommended Wall Thickness*												
Pipe Size	-150°F* To -64°F*	-65°F* to 0°F	1°F to 34°F	35°F to 60°F	61°F to 95°F	96°F to 120°F	121°F to 150°F	151°F to 220°F	221°F to 250°F	251°F to 300°F	301°F to 350°F	351°F* to 400°F*
1/2"	2"	2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"
3/4"	2"	2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"
1"	2"	2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"
1 1/4"	2"	2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"
1 1/2"	2"	2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"
2"	2 1/2"	2"	2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"	2"
2 1/2"	2 1/2"	2 1/2"	2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"	2"
3"	2 1/2"	2 1/2"	2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"	2"
3 1/2"	2 1/2"	2 1/2"	2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	2"	2"	2"	2 1/2"
4"	3"	2 1/2"	2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	2"	2"	2 1/2"	2 1/2"
6"	3"	2 1/2"	2 1/2"	2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2 1/2"	2 1/2"
8"	3"	3"	2 1/2"	2"	1 1/2"	1 1/2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"
10"	3"	3"	2 1/2"	2"	1 1/2"	1 1/2"	2"	2"	2"	2 1/2"	2 1/2"	3"
12"	3"	3"	2 1/2"	2"	1 1/2"	1 1/2"	2"	2"	2"	2 1/2"	3"	3"

Consult factory if more specific information is required.
Service temperatures outside ASTM C-1410 classifications - Consult factory