243, 1303, 233
TYPICAL PROPERTY SHEET

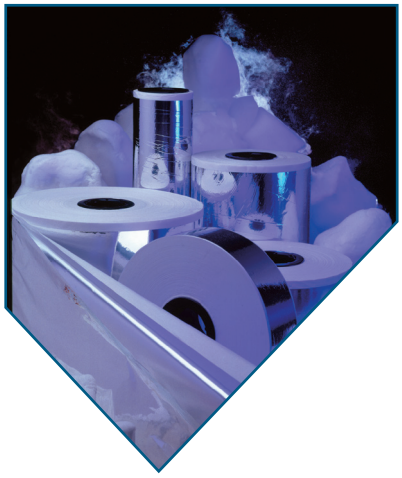
Lydall®

CryoTherm Family®
NON-OUTGASSING GLASS FIBER NONWOVENS

Partners in Performance

Super-Insulating for Super-Cooled Liquid Gases

CryoTherm® series is a family of 100% inorganic glass fiber that prevents costly evaporation losses of stored cryogenic liquid gases. In addition to providing an exceptionally efficient thermal barrier against heat transfer in insulated vacuum storage vessels, this multilayer insulation (MLI) system is:

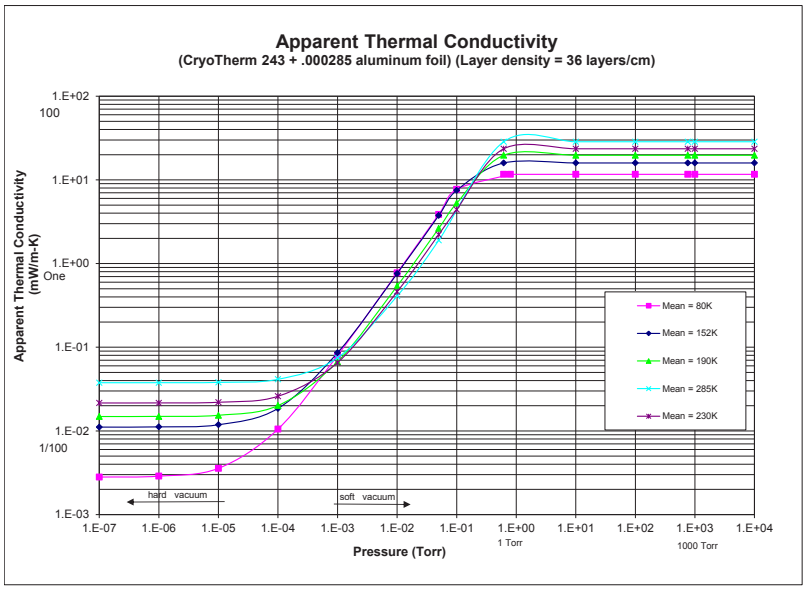


- Thin, light, and highly uniform
- Specifically engineered to work at temperatures approaching -452°F (4 K)
- Designed to maintain the integrity of sealed vacuum containers
- Highly recommended for use with potentially explosive substances, such as liquid hydrogen and liquid oxygen
- US DOT MC-338 (oxygen compatibility) certified and meets international testing requirements

For the single best option against cryogenic evaporation losses, trust *CryoTherm*® family of products.

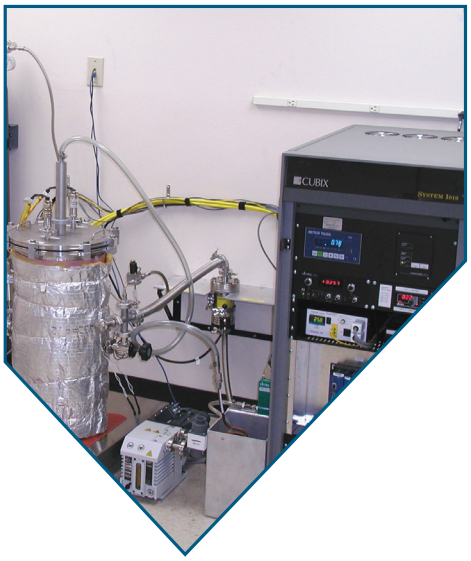
Material Property	CryoTherm® Product		
	243 : Thinnest grade to maximize reflective layers	1303 : Mid-range grade suitable for all cryogenic needs	233: Heaviest grade for highest tensile strength
Basis Weight, lb/2880ft² (g/m2)	7.1 (12)	8.5 (14)	9.5 (16)
Thickness, mil (mm)	2.6 (0.066)	3.1 (0.079)	3.3 (0.084)
Density, lb/ft³ (g/cc)	11 (0.18)	11 (0.18)	12 (0.19)
Machine Direction Tensile Strength, lb/in (kg/25 mm)	0.60 (0.27)	0.60 (0.27)	0.70 (0.31)
Thermal Conductivity at 70°F (21°C) & ambient pressure, BTU - in/hr - ft2 - °F (W/m K)	0.26 (0.037)	0.26 (0.037)	0.26 (0.037)

CryoTherm® Performance



Applications

- Cylinders
- Dewars
- ISO tanks (intermodal)
- Microbulk
- Mini storage (small plant)
- Rail cars
- Storage tanks
- Trailers
- Vacuum jacketed piping



Testing/Engineering Services

- Thermal imaging for performance validation
- Thermal conductivity for material characterization
- Thermal modeling for engineering solutions

Note: All product data is nominal and does not represent a specification.

All data and statements concerning these products may be considered as being indicative of representative properties and characteristics obtainable. We make no warranty, expressed or implied, concerning actual use or results because of industry specific influences.

Lydall® Partners In Performance

info@lydall.com North America & Asia: +1 518 273 6320 Europe, Middle East & Africa: +33 (0) 2 97 28 5300

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