



CRYOLENE 681 AA & VV

Resilient glass mineral wool blankets engineered for cryogenic tank decks

Design specifications for storage tanks containing cryogenic fluids such as liquefied natural gas (LNG), ethylene or nitrogen for chemical or combustion processes, are not only highly demanding in terms of construction, but also in terms of insulation. With the tank volume expanding and contracting depending on the level of liquid inside, the insulation must offer high levels of both compressibility and resilience. To meet this requirement, ISOVER has developed the unique CRYOLENE product range.

CRYOLENE 681 has been designed for the insulation of cryogenic tank suspended decks. The properties and performance of CRYOLENE 681 have been extensively tested by external institutes and the products are well-proven through decades of successful use worldwide in chemical and LNG applications.



Excellent thermal insulation

Excellent thermal insulation at cryogenic temperatures down to -170°C



Maximum flexibility

High resilience and flexibility designed to meet the specific mechanical demands of cryogenic tank construction during the full lifetime of operation



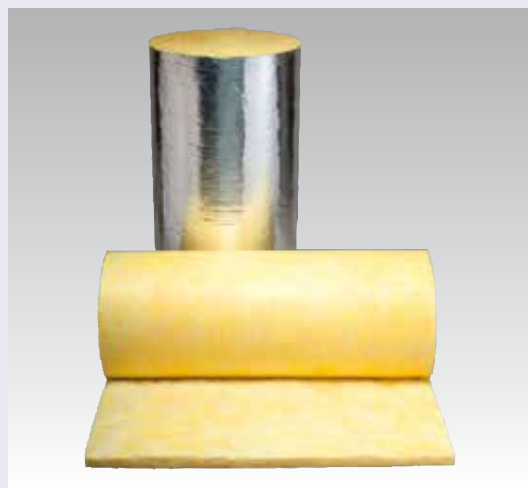
Easy and fast installation

Flexibility, light weight and long-length rolls helps to handle and install CRYOLENE 681 easier and faster



Effective fire protection

Non-combustible, Euroclass A1 („VV“) / Euroclass A2 s1 d0 („AA“) for effective fire protection on industry sites



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Characteristic	Symbol	Unit	Quantities and declared values						Standard
Thermal behaviour	T	[°C]	Operating temperature range -170 °C until + 120 °C						-
Thermal conductivity	T	[°C]	-150	-120	-100	-50	0	10	EN 12667 ISO 13787
	λ	[W/(m•K)]	0.014	0.019	0.022	0.029	0.038	0.040	
Specific thermal capacity	c	[kJ/(kg•K)]	1.03						ISO 10456
Fire protection / Behaviour in fire	-	-	681 VV: Non combustible Euroclass A1 681 AA: Euroclass A2-s1, d0						EN 13501-1
			681 VV: Fire Spread Index = 0; Smoke Development Index < 20 681 AA: Fire Spread Index < 25; Smoke Development Index < 25						ASTM E84
Tensile strength	-	-	681 VV: reinforced glass veil 681 AA: reinforced aluminium foil The facing contributes to provide the CRYOLENE blanket its tensile strength						-
Chemical behaviour	-	-	Do not contribute to corrosion of stainless steel No short term water absorption by partial immersion (WS1)						ASTM C795 EN 1609
Application field	-	-	Product for use in cryogenic applications, such as Liquid Natural Gas storage tanks Shall be enclosed in vapor and water tight construction Non compatible with liquid oxygen						EN 14303
Material	-	-	CRYOLENE products are highly resilient glass mineral wool rolls designed to retain their fibers elasticity over time at temperatures ranging from -170 °C to +120 °C With quality marks EUCEB and RAL by the Gütegemeinschaft Mineralwolle e.V., unrisky regarding health (according regulation EC n°1272/2008 Nota Q)						CINI 2.1.05
Facing	-	-	681 VV: faced with a yellow glass veil 681 AA: faced on one side with reinforced aluminium Other high tensile facings can be provided upon request						-
Quality management	-	-	CE-marked according to EN 14303 ISOVER has been certified according EN ISO 9001						EN 14303 EN ISO 9001
Miscellaneous	-	-	Storage: Rolls must be stocked vertically For best resilient characteristics, all CRYOLENE references should not be stocked more than 3 months MW-EN 14303-T1-WS1						EN 14303
Delivery form	-	-	Please contact your local ISOVER dealer All dimensions require minimum order quantities						-

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www.isover-technical-insulation.com

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