

## 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.



### LIGHTWEIGHT

Lightweight solution with up to 50% weight savings compared to standard insulation solutions



### FAST INSTALLATION

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



### THERMAL INSULATION

Excellent thermal insulation performance at cryogenic temperatures



### FIRE REACTION

Non-combustible, Euroclass A1 for effective fire protection on industry sites



### IMPROVED LOGISTICS

Transport and storage savings with up to 80% more material per pallet than standard solutions



CHARACTERISTIC	SYMBOL	UNIT	QUANTITIES AND DECLARED VALUES						STANDARD
Thermal conductivity	T	[°C]	-150	-120	-100	-50	0	100	EN 12667 ISO 13787
	λ	[W/(m•K)]	0.015	0.019	0.021	0.028	0.037	0.039	
Thermal behaviour	T	[°C]	Operating temperature range -170 °C until + 120 °C						-

CHARACTERISTIC	SYMBOL	UNIT	QUANTITIES AND DECLARED VALUES						STANDARD
Specific thermal capacity	c	kJ/(kg.K)	1.03						ISO 10456
Reaction to fire	-	-	681 VV: Non combustible; Euroclass A1 681 AA: Euroclass A2-s1, d0 681 VV: Fire Spread Index = 0; Smoke Development Index < 20 681 AA: Fire Spread Index < 25; Smoke Development Index < 25						EN 13501-1 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., unriskey regarding health according to German decree on dangerous substances, decree on prohibition of chemicals and to regulation EC No 1272/2008 Note Q						CINI 2.1.02
Facing	-	-	681 VV: faced with a yellow glass veil 681 AA: faced on one side with reinforced aluminium						-
Miscellaneous	-	-	Storage: Rolls must be stocked vertically. For best resilient characteristics, all CRYOLENE references should not be stocked packed more than 3 months. MW-EN 14303-T1-WS1						EN 14303
Quality management	-	-	CE-marked according to EN 14303 ISOVER is certified according to EN ISO 9001 and EN ISO 14001						EN 14303 EN ISO 9001 EN ISO 14001
Delivery form	-	-	Please contact your local ISOVER dealer All dimensions require minimum order quantities						-



**www.isover-technical-insulation.com**

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