

Product Information Sheet

DGN LT Blanket

Description

Introducing the DGN LT Blanket. Designed with enhanced physical properties to deliver improved thermal performance. This cutting-edge blanket provides all the benefits of its predecessor and more. DGN LT Blanket is manufactured from alkaline earth silicate (AES) wool. It is an excellent choice for companies that require compliant low bio-persistent (LBP) insulation to solve heat management challenges.

DGN LT Blankets are composed of DGN fibers, which are made from innovative DGN proprietary technology to create spun fibers with lower shot content. This forms a flexible needled blanket with improved handling and tensile strength, as well as lower thermal conductivity. It is especially suitable for demanding environments where temperature control is critical. DGN LT Blanket is completely inorganic, meaning it will not generate smoke or fumes during use, making it a safe and sustainable option for a range of industries

General Characteristics

DGN LT Blankets products have the following outstanding characteristics:

- Exceptional insulating properties (Low Thermal Conductivity & Low Heat Storage)
- High temperature stability (up to 1200°C)
- Resistance to thermal shock
- Good handling strength
- Excellent flexibility & resiliency
- Light weight
- Completely inorganic



Typical Applications

Power Generation

- Heat Recovery Steam Generators (HRSG) Duct Insulation
- Gas & Steam Turbines Exhausts
- Silencer Panels
- Boilers & Duct Insulation

Appliance

- High-Temperature Commercial Cooking Appliances
- Hearth Chimney Insulation
- High-Temperature Gaskets

Non-Ferrous (Aluminum)

- Aluminum Transfer Ladle Covers
- Aluminum Melting/Holding Furnace Doors
- Carbon Baking Furnace Covers

General Use & Other Industries

(Petrochemical, Ferrous, Pollution Control, etc.)

- High Temperature Furnaces, Boilers, And Fired Heaters
- Back-Up Insulation
- High Temperature Seals & Gaskets
- Heat Shields & Maintenance Blanket
- Expansion Joints
- Stress Relieving Blankets
- Glass Tank Crown Insulation
- Flue Insulation
- Regenerative Thermal Oxidizers (RTO)

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Typical Product Parameters

DGN LT Blanket	
Physical Properties	
Color	White
Classification Temperature* °C (°F)	1200 (2192)
Continuous Use Temperature** °C (°F)	1100 (2012)
Melting Point °C (°F)	>1330 (2426)

Typical Chemical Analysis (wt. %)	
SiO ₂	61.0 - 67.0
CaO	27.0 - 33.0
MgO	2.5 - 6.5
Al ₂ O ₃	<1.0
Fe ₂ O ₃	<0.6

Permanent Linear Shrinkage (EN 1094-1)	
After 24 Hour Soak @ 1200°C (2192°F)	1.0%

Average Tensile Strength (EN 1094-1)				
Density, kg/m ³ (lb/ft ³)	64 (4)	96 (6)	128 (8)	160 (10)
Tensile Strength, kPa (psi)	42 (6.1)	60 (8.7)	80 (11.3)	88 (12.8)

Thermal Conductivity (ASTM C201)				
Density, kg/m ³ (lb/ft ³)	64 (4)	96 (6)	128 (8)	160 (10)
Mean Temperature	Thermal Conductivity, W/m-K (Btu in/hr ft ² °F)			
200°C (392°F)	0.06 (0.42)	0.06 (0.42)	0.05 (0.35)	0.05 (0.35)
400°C (752°F)	0.11 (0.76)	0.09 (0.62)	0.08 (0.56)	0.08 (0.56)
600°C (1112°F)	0.17 (1.18)	0.14 (0.97)	0.12 (0.83)	0.11 (0.76)
800°C (1472°F)	0.26 (1.80)	0.20 (1.39)	0.18 (1.25)	0.15 (1.04)
1000°C (1832°F)	0.38 (2.63)	0.29 (2.01)	0.25 (1.73)	0.21 (1.46)

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Health and Safety Information

DGN LT Fiber Blanket is considered to be a low bio-persistent (LBP) substance and have been designed to allow rapid clearance from the lung, following inhalation.