

MGM AEROGEL INSULATION – PRODUCT RANGE DATA SHEETS

Product Overview

This document collects the technical data sheets for the five stocked grades of MGM silica aerogel insulation blanket supplied by MG Materials across India and the GCC. All grades are hydrophobic, non-combustible (Class A / ASTM E84, EN 13501-1) and share the same nanoporous silica aerogel chemistry on a glass-fibre / PET needle-felt carrier; they differ in thermal grade (ECO or 650), thickness, roll size and facing. Use the summary table to pick the grade, then refer to the individual SKU page for full properties. For prices, stock and delivery contact cs@mg-materials.com | +91 88606 44605 | www.mg-materials.com

Range Summary

SKU	Grade / Thickness / Facing	λ @ 25 °C Max temp Roll size
MGM-AGL-ECO-10	ECO grade, 10 mm, unfaced	0.029 W/m·K 650 °C 1.5 × 25 m
MGM-AGL-650-3	650 grade, 3 mm, unfaced	0.018 W/m·K 650 °C 1.5 × 50 m
MGM-AGL-650-5	650 grade, 5 mm, unfaced	0.018 W/m·K 650 °C 1.5 × 40 m
MGM-AGL-650-10	650 grade, 10 mm, unfaced	0.018 W/m·K 650 °C 1.5 × 25 m
MGM-AGL-650-10F	650 grade, 10 mm, foil-faced	0.018 W/m·K 650 °C (150 °C foil) 1.5 × 25 m

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TECHNICAL DATA SHEET — MGM ECO AEROGEL BLANKET – 10 mm

SKU: MGM-AGL-ECO-10 | Family: Aerogel | Supplier: MG Materials

Product Overview

MGM Aerogel Blanket is a flexible, hydrophobic, nanoporous silica aerogel insulation reinforced with non-woven fibres. It delivers 2–4× the thermal performance of conventional insulation at a fraction of the thickness, with excellent durability across cryogenic and high-temperature service.

Typical Applications

- Industrial pipe and equipment insulation
- LNG / cryogenic storage and transfer lines
- Refineries, petrochemicals, and offshore platforms
- District heating and steam piping
- Power generation and process industries

Key Features

- Ultra-low thermal conductivity ($\lambda \approx 0.018 \text{ W/m}\cdot\text{K}$ @ 25 °C)
- Hydrophobic — repels water, breathable to vapour
- Flexible, easy to cut and install around complex geometries
- High-temperature service to 650 °C (depending on grade)
- Reduces insulation thickness by 50–80 % vs. conventional

[Product Image]

Technical Properties

Properties	MGM-AGL-ECO-10	Unit
Bulk Density	150–190	kg/m ³
Nominal Thickness	10	mm
Roll Size (W × L)	1.5 m × 25 m	m
Coverage per Roll	37.5 m ² (≈ 403 sq ft)	—
Facing	Unfaced (plain)	—
Classification / Max Service Temp	650	°C
Short-Term Service Temp	1200	°C
Specific Heat (Cp)	1050	J/kg·K
Classification	ASTM C1728 Type III, Grade 1A	—
Thermal Conductivity (λ)	—	—
λ @ 0°C	0.029	W/m·K
λ @ 25°C	0.029	W/m·K
λ @ 50°C	0.0323	W/m·K
λ @ 100°C	0.039	W/m·K
λ @ 200°C	0.049	W/m·K
λ @ 300°C	0.061	W/m·K
Typical Application	Economy hot-side insulation, 25–300 °C	—
Additional Notes	Cost-optimised grade for utility steam and HVAC lines	—

TECHNICAL DATA SHEET — MGM AEROGEL 650 BLANKET – 3 mm

SKU: MGM-AGL-650-3 | Family: Aerogel | Supplier: MG Materials

Product Overview

MGM Aerogel Blanket is a flexible, hydrophobic, nanoporous silica aerogel insulation reinforced with non-woven fibres. It delivers 2–4× the thermal performance of conventional insulation at a fraction of the thickness, with excellent durability across cryogenic and high-temperature service.

Typical Applications

- Industrial pipe and equipment insulation
- LNG / cryogenic storage and transfer lines
- Refineries, petrochemicals, and offshore platforms
- District heating and steam piping
- Power generation and process industries

Key Features

- Ultra-low thermal conductivity ($\lambda \approx 0.018$ W/m·K @ 25 °C)
- Hydrophobic — repels water, breathable to vapour
- Flexible, easy to cut and install around complex geometries
- High-temperature service to 650 °C (depending on grade)
- Reduces insulation thickness by 50–80 % vs. conventional

[Product Image]

Technical Properties

Properties	MGM-AGL-650-3	Unit
Bulk Density	160–240	kg/m ³
Nominal Thickness	3	mm
Roll Size (W × L)	1.5 m × 50 m	m
Coverage per Roll	75 m ² (≈ 807 sq ft)	—
Facing	Unfaced (plain)	—
Service Temperature (min)	-50	°C
Classification / Max Service Temp	650	°C
Short-Term Service Temp	1400	°C
Specific Heat (Cp)	1050	J/kg·K
Classification	ASTM C1728 Type III, Grade 1A	—
Thermal Conductivity (λ)	—	—
λ @ 0°C	0.018	W/m·K
λ @ 25°C	0.018	W/m·K
λ @ 50°C	0.0222	W/m·K
λ @ 100°C	0.023	W/m·K
λ @ 200°C	0.028	W/m·K
λ @ 300°C	0.035	W/m·K
λ @ 400°C	0.047	W/m·K
λ @ 500°C	0.058	W/m·K
λ @ 600°C	0.068	W/m·K
Typical Application	EV battery pads, electronics, thin-profile wraps	—
Additional Notes	Thinnest grade; die-cut and adhesive-backed pads available	—

TECHNICAL DATA SHEET — MGM AEROGEL 650 BLANKET – 5 mm

SKU: MGM-AGL-650-5 | Family: Aerogel | Supplier: MG Materials

Product Overview

MGM Aerogel Blanket is a flexible, hydrophobic, nanoporous silica aerogel insulation reinforced with non-woven fibres. It delivers 2–4× the thermal performance of conventional insulation at a fraction of the thickness, with excellent durability across cryogenic and high-temperature service.

Typical Applications

- Industrial pipe and equipment insulation
- LNG / cryogenic storage and transfer lines
- Refineries, petrochemicals, and offshore platforms
- District heating and steam piping
- Power generation and process industries

Key Features

- Ultra-low thermal conductivity ($\lambda \approx 0.018$ W/m·K @ 25 °C)
- Hydrophobic — repels water, breathable to vapour
- Flexible, easy to cut and install around complex geometries
- High-temperature service to 650 °C (depending on grade)
- Reduces insulation thickness by 50–80 % vs. conventional

[Product Image]

Technical Properties

Properties	MGM-AGL-650-5	Unit
Bulk Density	160–240	kg/m ³
Nominal Thickness	5	mm
Roll Size (W × L)	1.5 m × 40 m	m
Coverage per Roll	60 m ² (≈ 646 sq ft)	—
Facing	Unfaced (plain)	—
Service Temperature (min)	-50	°C
Classification / Max Service Temp	650	°C
Short-Term Service Temp	1400	°C
Specific Heat (Cp)	1050	J/kg·K
Classification	ASTM C1728 Type III, Grade 1A	—
Thermal Conductivity (λ)	—	—
λ @ 0°C	0.018	W/m·K
λ @ 25°C	0.018	W/m·K
λ @ 50°C	0.0222	W/m·K
λ @ 100°C	0.023	W/m·K
λ @ 200°C	0.028	W/m·K
λ @ 300°C	0.035	W/m·K
λ @ 400°C	0.047	W/m·K
λ @ 500°C	0.058	W/m·K
λ @ 600°C	0.068	W/m·K
Typical Application	HVAC ducting, building retrofits, small-bore piping	—
Additional Notes	Space-saving grade for walls, façades and chilled-water lines	—

TECHNICAL DATA SHEET — MGM AEROGEL 650 BLANKET – 10 mm

SKU: MGM-AGL-650-10 | Family: Aerogel | Supplier: MG Materials

Product Overview

MGM Aerogel Blanket is a flexible, hydrophobic, nanoporous silica aerogel insulation reinforced with non-woven fibres. It delivers 2–4× the thermal performance of conventional insulation at a fraction of the thickness, with excellent durability across cryogenic and high-temperature service.

Typical Applications

- Industrial pipe and equipment insulation
- LNG / cryogenic storage and transfer lines
- Refineries, petrochemicals, and offshore platforms
- District heating and steam piping
- Power generation and process industries

Key Features

- Ultra-low thermal conductivity ($\lambda \approx 0.018 \text{ W/m}\cdot\text{K}$ @ 25 °C)
- Hydrophobic — repels water, breathable to vapour
- Flexible, easy to cut and install around complex geometries
- High-temperature service to 650 °C (depending on grade)
- Reduces insulation thickness by 50–80 % vs. conventional

[Product Image]

Technical Properties

Properties	MGM-AGL-650-10	Unit
Bulk Density	160–240	kg/m ³
Nominal Thickness	10	mm
Roll Size (W × L)	1.5 m × 25 m	m
Coverage per Roll	37.5 m ² (≈ 403 sq ft)	—
Facing	Unfaced (plain)	—
Service Temperature (min)	-50	°C
Classification / Max Service Temp	650	°C
Short-Term Service Temp	1400	°C
Specific Heat (Cp)	1050	J/kg·K
Classification	ASTM C1728 Type III, Grade 1A	—
Thermal Conductivity (λ)	—	—
λ @ 0°C	0.018	W/m·K
λ @ 25°C	0.018	W/m·K
λ @ 50°C	0.0222	W/m·K
λ @ 100°C	0.023	W/m·K
λ @ 200°C	0.028	W/m·K
λ @ 300°C	0.035	W/m·K
λ @ 400°C	0.047	W/m·K
λ @ 500°C	0.058	W/m·K
λ @ 600°C	0.068	W/m·K
Typical Application	High-temp pipe & vessel insulation	—
Additional Notes	Standard grade; replaces 40–50 mm rockwool; stocked in Delhi NCR	—

TECHNICAL DATA SHEET — MGM AEROGEL 650 BLANKET – 10 mm FOIL

SKU: MGM-AGL-650-10F | Family: Aerogel | Supplier: MG Materials

Product Overview

MGM Aerogel Blanket is a flexible, hydrophobic, nanoporous silica aerogel insulation reinforced with non-woven fibres. It delivers 2–4× the thermal performance of conventional insulation at a fraction of the thickness, with excellent durability across cryogenic and high-temperature service.

Typical Applications

- Industrial pipe and equipment insulation
- LNG / cryogenic storage and transfer lines
- Refineries, petrochemicals, and offshore platforms
- District heating and steam piping
- Power generation and process industries

Key Features

- Ultra-low thermal conductivity ($\lambda \approx 0.018 \text{ W/m}\cdot\text{K}$ @ 25 °C)
- Hydrophobic — repels water, breathable to vapour
- Flexible, easy to cut and install around complex geometries
- High-temperature service to 650 °C (depending on grade)
- Reduces insulation thickness by 50–80 % vs. conventional

[Product Image]

Technical Properties

Properties	MGM-AGL-650-10F	Unit
Bulk Density	160–240	kg/m ³
Nominal Thickness	10	mm
Roll Size (W × L)	1.5 m × 25 m	m
Coverage per Roll	37.5 m ² (≈ 403 sq ft)	—
Facing	Aluminium foil, one side	—
Service Temperature (min)	-50	°C
Classification / Max Service Temp	650	°C
Short-Term Service Temp	1400	°C
Specific Heat (Cp)	1050	J/kg·K
Classification	ASTM C1728 Type III, Grade 1A	—
Thermal Conductivity (λ)	—	—
λ @ 0°C	0.018	W/m·K
λ @ 25°C	0.018	W/m·K
λ @ 50°C	0.0222	W/m·K
λ @ 100°C	0.023	W/m·K
λ @ 200°C	0.028	W/m·K
λ @ 300°C	0.035	W/m·K
λ @ 400°C	0.047	W/m·K
λ @ 500°C	0.058	W/m·K
λ @ 600°C	0.068	W/m·K
Typical Application	Chilled-water, HVAC and cold-chain lines	—
Additional Notes	Foil side rated to 150 °C; vapour barrier and clean finish	—