

Rock wool pipe insulation

Rock wool pipe insulation from TPMC is a pre-formed mineral fiber material for thermal and acoustic insulation of industrial pipelines. Made from basalt and dolomite through high-temperature melting and fiberization, it forms rigid pipe sections meeting ASTM C547. This non-combustible material offers fire resistance, low thermal conductivity for energy savings, and sound absorption. It is lightweight, chemically stable, and easy to install.

Widely used for steam, heat transfer oil, and process lines in petroleum, chemical, and power industries, as well as HVAC hot/cold water lines, it maintains process temperatures and improves energy efficiency and safety.



- Certificate: ISO
- Standard: ASTM C547, UL 723
- Facing: Plain, aluminum glass cloth (AG), aluminum foil (ALK), glass fiber cloth (GF)
- Installation: Factory-applied longitudinal slit for easy snap-on installation over pipes.
- Environment: Corrosion-free, asbestos-free, no CFCs / HCFCs / HFCs

Available sizes

Pipe size		Pipe insulation ID (mm)	Nominal density (kg/m ³)	Thickness (mm)	Standard length (mm)	Fire reaction	Ref. No.
NPS	DN						
1/2"	15	22	110 / 120 / 140	25 ~ 50	1000	Class A1	P9101 (ISO)
3/4"	20	27	110 / 120 / 140	25 ~ 80	1000	Class A1	P9102 (ISO)
1"	25	34	110 / 120 / 140	25 ~ 80	1000	Class A1	P9103 (ISO)
1-1/4"	32	43	110 / 120 / 140	25 ~ 100	1000	Class A1	P9104 (ISO)
1-1/2"	40	48	110 / 120 / 140	25 ~ 100	1000	Class A1	P9105 (ISO)
2"	50	60	110 / 120 / 140	25 ~ 100	1000	Class A1	P9106 (ISO)
2-1/2"	65	76	110 / 120 / 140	25 ~ 100	1000	Class A1	P9107 (ISO)
3"	80	89	110 / 120 / 140	25 ~ 100	1000	Class A1	P9108 (ISO)
4"	100	114	110 / 120 / 140	25 ~ 120	1000	Class A1	P9109 (ISO)
5"	125	140	110 / 120 / 140	30 ~ 150	1000	Class A1	P9110 (ISO)
6"	150	169	110 / 120 / 140	30 ~ 150	1000	Class A1	P9111 (ISO)
8"	200	219	110 / 120 / 140	40 ~ 150	1000	Class A1	P9112 (ISO)
10"	250	273	110 / 120 / 140	40 ~ 150	1000	Class A1	P9113 (ISO)
12"	300	325	110 / 120 / 140	40 ~ 150	1000	Class A1	P9114 (ISO)
14"	350	356	110 / 120 / 140	50 ~ 150	1000	Class A1	P9115 (ISO)
16"	400	406	110 / 120 / 140	50 ~ 150	1000	Class A1	P9116 (ISO)
18"	450	456	110 / 120 / 140	50 ~ 150	1000	Class A1	P9117 (ISO)
20"	500	508	110 / 120 / 140	70 ~ 150	1000	Class A1	P9118 (ISO)
24"	600	610	110 / 120 / 140	80 ~ 150	1000	Class A1	P9119 (ISO)

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Note:

1. Standard length is 1 meter. Custom lengths are available upon request.
2. For operating temperatures above 350°C, it is recommended to install the insulation in two layers with all longitudinal and circumferential joints staggered between layers. A minimum longitudinal overlap of 150 mm is suggested.
3. Fire reaction: Class A1 (non-combustible) as per GB 8624 and ASTM E84 (Flame Spread = 0, Smoke Development = 5).



Technical Parameters

Property	Test method	110 kg/m³	120 kg/m³	140 kg/m³
Service temperature	ASTM C411	≤ 650°C	≤ 650°C	≤ 650°C
Thermal conductivity (50°C)	ASTM C518 / C177	≤ 0.039 W/(m·K)	≤ 0.039 W/(m·K)	≤ 0.039 W/(m·K)
Thermal conductivity (150°C)	ASTM C518 / C177	≤ 0.053 W/(m·K)	≤ 0.050 W/(m·K)	≤ 0.052 W/(m·K)
Thermal conductivity (250°C)	ASTM C518 / C177	≤ 0.078 W/(m·K)	≤ 0.069 W/(m·K)	≤ 0.070 W/(m·K)
Linear shrinkage	ASTM C356	≤ 2.0 %	≤ 2.0 %	≤ 2.0 %
Water vapor sorption	ASTM C1104	≤ 2.0 %	≤ 2.0 %	≤ 2.0 %
Water Repellency	ASTM C1511	≥ 99.0 %	≥ 99.0 %	≥ 99.0 %
Water leachable chloride content (Cl⁻)*	ASTM C871	≤ 10.0 ppm	≤ 10.0 ppm	≤ 10.0 ppm

Note: *Low water leachable chloride content products are suitable for use over austenitic stainless steel and meet the requirements of ASTM C795.