

RAKtherm GAS PIPES

The Safest Gas Piping Solution

Unveiling RAKtherm Gas Piping Solution – Elevating Piping Excellence to Greater Peaks! Precision-engineered for robust performance in gas piping applications

Discover excellence with RAKtherm, a renowned global brand synonymous with highly effective and efficient piping systems. Embracing a relentless pursuit of solutions to the most significant challenges in the MEP industry, we have earned unparalleled recognition in the piping sector. Our keen understanding of the technological landscape in plumbing technology solutions positions us to successfully tackle the industry's most demanding challenges.

Committed to making a tangible impact, we pride ourselves on delivering innovative, engineered piping solutions that stand as breakthroughs in the industry. We are setting the standard for excellence in gas piping, providing solutions that transcend expectations.

Product Description:

RAKtherm presents Medium-density polyethylene (MDPE) and High-density polyethylene (HDPE) GAS pipes, meticulously engineered from specially formulated PE material, available in two distinct grades: PE80 (YELLOW) and PE100 (ORANGE). These grades are precisely determined by the long-term strength of the respective materials, referred to as the minimum required strength (MRS). The compound features a meticulously calibrated blend of pigments and optimized stabilizers, ensuring unparalleled long-term thermal stability and UV-resistance. This renders our pipes impeccably suited for deployment in natural gas distribution systems, and versatile enough to accommodate applications involving liquid petroleum gas (LPG), propane, and low-pressure after-meter gas.

Explore our comprehensive range of sizes, precisely tailored to meet diverse gas flow rate requirements, exemplifying our commitment to technical precision and professional excellence.

Tests As Per ISO Standard ISO 4437 & ISO 3126:

- Hydro static pressure test.
- Elongation break test.
- Resistance to slow and rapid crack.
- Thermal stability test.
- Melt flow rate.
- Longitudinal reversion test.

Advantages of RAKtherm PE Gas Pipes:

- Exceptional resistance to corrosion.
- Light and elastic structure.
- Long service life.
- Sustainable and eco-conscious product.
- Excellent resistance to rapid crack propa gation and slow crack growth.
- High strength structure.
- Low-cost maintenance.
- Quick and straightforward installation.
- Adaptive behavior with ground movements.

Physical Properties:

PE80 POLYETHYLENE	PE100 POLYETHYLENE
Density (Compound)-944kg/m	Density (Compound)-951kg/m
Melt Flow Rate (190°C/5.0kg)-0.80g/10min	Melt Flow Rate (190°C/5.0kg)-0.25g/10min
Tensile Modulus (1mm/min)-800MPa	Tensile Modulus (1mm/min)-1000MPa
Tensile Strain at Break (50mm/min) - >600%	Tensile Strain at Break (50mm/min)- >600%
Tensile Stress at Yield (50mm/min) - 19MPa	Tensile Stress at Yield (50mm/min) - 25MPa
Pigment Dispersion-<=3	Pigment Dispersion-<=3
Oxidation Induction Time (210°C) - >=20mins	Oxidation Induction Time (210°C) - >=20mins
Resistance to Slow Crack Growth - >5000hrs (8bar 80°C)	Resistance to Slow Crack Growth - >1000hrs (9.2bar, 80°C)

Available Dimensions:

Nominal outside diameter d_n	Minimum wall thickness e_{min}[a]						
	SDR 9	SDR 11[b]	SDR 13,6	SDR 17[b]	SDR 17,6[c]	SDR 21	SDR 26
16	3,0	2,3[d]	—	—	—	—	—
20	3,0	2,3[d]	—	—	—	—	—
25	3,0	2,3[d]	2,3[d]	—	—	—	—
32	3,6	3,0	2,4[d]	2,3[d]	2,3[d]	—	—
40	4,5	3,7	3,0	2,4[d]	2,3[d]	2,3[d]	—
50	5,6	4,6	3,7	3,0	2,9[d]	2,4[d]	2,3[d]
63	7,1	5,8	4,7	3,8	3,6	3,0	2,5[d]
75	8,4	6,8	5,6	4,5	4,3	3,6	2,9[d]
90	10,1	8,2	6,7	5,4	5,2	4,3	3,5
110	12,3	10,0	8,1	6,6	6,3	5,3	4,2
125	14,0	11,4	9,2	7,4	7,1	6,0	4,8
140	15,7	12,7	10,3	8,3	8,0	6,7	5,4
160	17,9	14,6	11,8	9,5	9,1	7,7	6,2

"The most eminent high-end global manufacturer of piping systems technology"

Throughout the years, RAKtherm is known for its world-class brand delivering effective and efficient piping systems. With continuous pursuance in finding solutions to the major challenges in the MEP industry, we established ourselves highly recognized in the piping industry. Our understanding to the technological quest in plastic piping systems enables us to address these demanding challenges.

We are committed to making a real difference in providing hi-technological piping innovations that are breakthrough in the industry.

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ENGINEERED FOR ROBUST **GAS** DISTRIBUTION



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Reinvented:
Precision Piping Solutions

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Strength That Stands the Test of Time.

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Updated Dec-2025

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