

Protect your pipe insulation from water absorption and CUI

Get award-winning performance with ProRox®
and WR-Tech™ (Water Repellent Technology)

**ROCKWOOL
ProRox®**

WR-Tech™



Water
Repellency
Technology



ProRox WR-Tech: when durability matters.

Need to protect your plant from water? We lead the field. ProRox stone wool insulation with WR-Tech Water Repellency Technology was the first of its kind and remains the best-in-class solution to keep your plant dry. It maintains a durable insulation performance over the critical corrosion under insulation (CUI) temperature range.

Heat loss can increase 8x when insulation is wet²



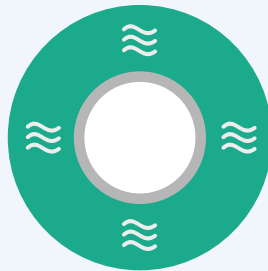
Thermal conductivity of water = 25x greater than air

+ 5vol% moisture

dry insulation

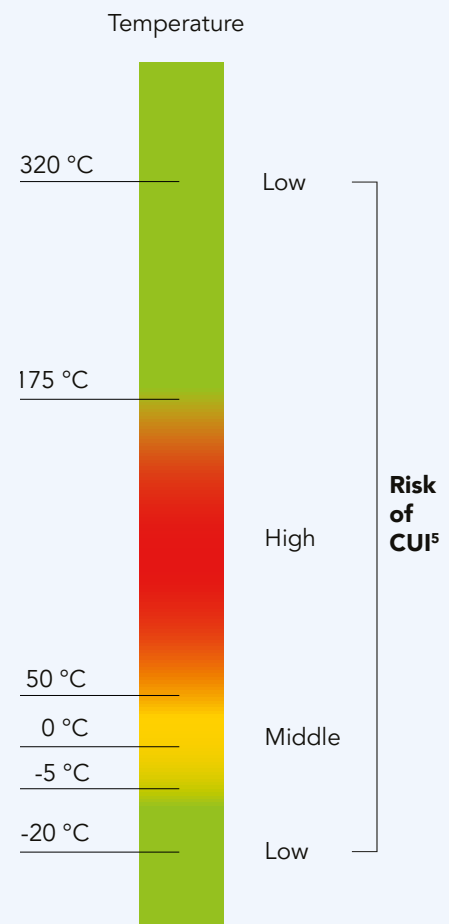


= thermal resistance decreases by 25%¹



= minimal thermal loss & CO₂ emissions

Risk of CUI



This is what The Association for Materials Protection and Performance (AMPP) says:

“Because CUI is a product of wet metal exposure duration, the insulation system that holds the least amount of water and dries most quickly should result in the least amount of corrosion damage to equipment.”

Why stay ahead of water?

Water is a big challenge for industry, because exposing industrial installations to water threatens continuous operations at your plant. Water ingress cannot be avoided and will occur under every type of insulation. Water is the main cause of unanticipated heat loss, downtime and spills due to corrosion under insulation (CUI).

Water promotes corrosion under insulation (CUI)

CUI typically occurs below 175°C³ and in cyclic plant operations:

- The risk/severity of CUI typically depends on environment, plant design, inspection & maintenance, and insulation
- CUI is responsible for up to 40% of industrial pipe work maintenance costs⁴
- 50% of all hazardous events in industrial plants⁴, such as pipe leakages or ruptures, are caused by aging mechanisms like erosion, corrosion and fatigue

What's the best insulation to keep your plant dry?

Low water absorption of insulation is key. As well as:

- Drying ability
- Low leachable chloride content
- Durable performance over the CUI range (<175°C)



1. US Steam Digest Volume IV
2. WKS Letter No. 11
3. Reference: Shell DEP 30.46.00.31-Gen. September 2011
4. Managing Aging Plants 2020
5. According to INCI

ProRox WR-Tech: the best-in-class solution to keep your plant dry

WR-Tech has proven its value since 2017 and major operators in industry are now using it. ROCKWOOL ProRox with WR-Tech won AMPP's 2019 Corrosion Innovation of the year award.

Convincing arguments

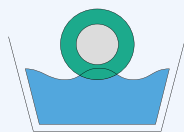
WR-Tech is a durable choice to keep your plant dry, now and in the long run.

- **Sustained insulation performance**, confirmed in third-party tests
- **Silicone oil-free**, in full compliance with the strictest standards
- Durable performance over the **critical CUI temperature range**
 - Best drying ability thanks to the **fast water dissipation**
 - **Lowest water absorption**, even after cyclic heating and prolonged aging

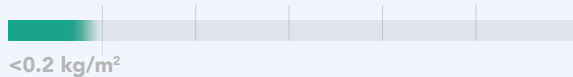
Key features

Here's why ProRox with WR-Tech is the ideal way to keep your plant dry and to mitigate Corrosion Under Insulation (CUI).

Low water absorption



"Rain test"
Partial immersion 24hrs
(EN 13472/ EN 1609)



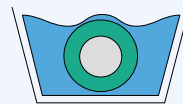
Non heated, non aged	≤ 0.2 kg/m ²
After heating at 250°C for 24 hrs	≤ 0.2 kg/m ²
After aging for 6 months at ambient temperature, RV x%	≤ 0.2 kg/m ²
Cyclic heating 50°C - 250°C for 21 days	≤ 0.2 kg/m ²

Silicone oil free

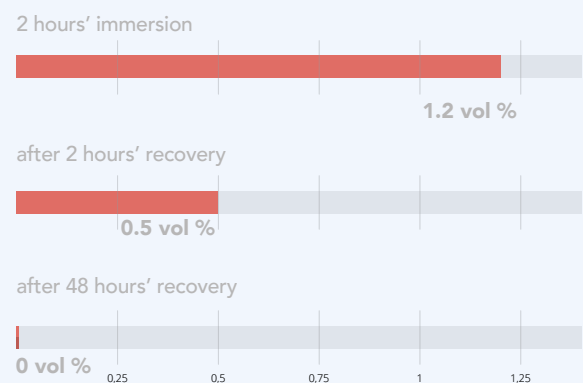
Yes

Complies with VW specification PV 3.10.7, does not result in fish-eyes, usable in paint shops.

Drying ability



Full immersion: 2 hrs
(ASTM C1763)



2 hrs immersion	1.2 vol%
2 hrs recovery	0.5 vol%
48 hrs recovery	0.0 vol%

Low water leachable chloride content

≤ 10 mg/kg

Complies with strict industry standards EN 13468 and ASTM C795.

Our WR-Tech products

WR-Tech is standard in ProRox Wired Mats and on ProRox mandrel wound Pipe Sections and is available off the shelf.

No double stocks needed. No chance of using incorrect material.

ProRox Wired Mats

For insulation of large diameter pipework, vessels and columns or applications where design flexibility is required.

Available as standard in Wired Mats:

- ProRox WM 950
- ProRox WM 960

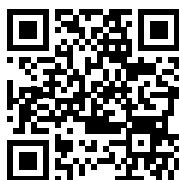


ProRox mandrel wound Pipe Sections

For easy & fast insulation of pipework.

Available in Pipe Sections:

- ProRox PS 960
- ProRox PS 970



Learn more about WR-Tech
rti.rockwool.com/wr-tech/



“ProRox with WR-Tech is a durable choice to mitigate CUI.”

ROCKWOOL Technical Insulation is a global business with a local presence, supplying advanced stone wool insulation solutions to the process and marine & offshore industries. Part of the ROCKWOOL Group, with approx. 12 000 passionate colleagues in 40 countries and sales in more than 120, we have manufacturing and service facilities around the world, ensuring we're there when you need us, with the right expertise and products to meet your requirements. See our key ROCKWOOL Technical Insulation locations below.



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ROCKWOOL Group is the world leader in stone wool products, from building insulation to acoustic ceilings, external cladding systems to horticultural solutions, engineered fibres for industrial use to insulation for the process industry and marine & offshore. We are committed to enriching the lives of everyone who experiences our products and services, and to helping customers and communities tackle many of today's biggest sustainability and development challenges including energy consumption, noise pollution, fire resilience, water scarcity, urban flooding and more.

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TECHNICAL INSULATION