



**TS-NANO**

# Nano-Modified Polymer Sealant – TSN-25

## KEY FEATURES

- TSN-25 is denser than water
- TSN-25 does not mix or dilute by water
- Able to be deployed riglessly using a wireline dump bailer
- Environmentally friendly material that is non-contaminant to groundwater.
- Suitable for 1-2L/min / 0.3-0.5 gpm low-rate pumping

## Overview

When cement squeeze becomes ineffective and detrimental in repairing surface casing vent flow, **TSN-25**, a nano-modified polymer sealant developed by TS-Nano, is the best alternative.

TSN-25 is a patented nano-modified polymer sealant engineered to penetrate cement and rock microcracks behind casing. It creates an impermeable barrier that stops gas migration, ensuring long-term wellbore integrity and proper well closure.

## BENEFITS

- **Reliable Sealing:** Penetrates microcracks, displaces water and gas, and hardens in saturated environments
- **Wide range of downhole temperature application:** Sealant can be applied to a wide range of downhole temperatures 10-120 °C (50-250°F)
- **Durable:** High resistance to acids and service life exceeding 100 years\*
- **Accepted by Regulators:** Successfully applied and approved in Alberta and British Columbia, Canada

## Performance Specifications

Crack penetration	< 20 microns
Workable time	Up to 240 minutes**
Deployment downhole temperature	10 – 120°C / 50 – 250°F
Bond strength to steel	7.0 MPa / 1,000 psi
Tensile strength	14.0 MPa / 2,000 psi
Elongation at break	8 – 12%

\* Lab test with reference material  
 \*\*can be engineered to tailor operations

## Contact Us

To learn more about TSN-25's technical specifications, field performance, or to request a case study, contact TS-Nano's technical team at:

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