



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 wireline dump bailer
- Resistance to acid
- Non-toxic ingredients
- 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
- **High-Temperature Performance:** Hardened sealant maintains integrity as high as 330°C \ 626°F
- **Durable:** Service life exceeding 100 years under wellbore conditions*
- **Accepted by Regulators:** Successfully applied and accepted in Alberta and British Columbia, Canada

Performance Specifications

Crack penetration	< 10 microns
Workable time	90 – 120 minutes**
Deployment downhole temperature	10 – 80°C / 50 – 176°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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