Dow Oil & Gas

Ensuring Long and Reliable System Life of Industrial Engines

NORKOOL™ Industrial Coolants

The NORKOOL™ Advantage

The NORKOOL™ family of coolants is Dow's premium heat transfer fluid product line specially designed for gas compression engines and line heaters. The enhanced formulation of NORKOOL coolants includes Dow's patented anti-scaling technology with our proven phosphate- and nitrite-based corrosion inhibitor. This combination provides long-term protection of cast iron, copper alloys and solders, even in the presence of elevated levels of chloride, sulfate or water hardness.

Corrosion inhibitor packages optimized for specific applications make NORKOOL coolants more "forgiving" than alternative fluids and ensure long and reliable system life, in conjunction with proper maintenance and operation.

Is Your Coolant Designed for Industrial Engine Applications?

When selecting a coolant, it's important to choose the right product for the application. Both NORKOOL™ industrial coolants and automotive antifreeze fluids perform in a similar manner – removing heat, preventing system freezing and protecting components from corrosion. However, these two products are designed for vastly different applications and thus exhibit very different performance attributes, as shown here.

Comparison of NORKOOL™ Industrial Coolants and Automotive Antifreeze

NORKOOL™ Industrial Coolants

- Specifically designed for long-term use in natural gas compressor engines, line heaters and other heavy-duty applications
- Contain an inhibitor package that reacts with the metal of the surface and forms a fine barrier of iron oxide
- Iron oxide barrier can remain stable for many years with minimal maintenance and does not reduce heat transfer fluid efficiency
- Can protect the cooling system for up to 25 years or more, without coolant replacement, when correct fluid maintenance practices are followed
- Allow system to be safely shut down or mothballed for extended periods, protecting metal surfaces against corrosion and freezing

Automotive Antifreeze

- Designed for short-term use in vehicles containing aluminum engine components
- Protection of aluminum surface is often provided by silicates, which react with ethylene or propylene glycol components of the antifreeze
- Silicates and glycols form silicate gel, significantly reducing heat transfer fluid efficiency
- Antifreeze must be replaced every two years to prevent gel formation, as well as potential issues with silicate scale
- Silicate gel and silicate scale are difficult to remove, will often inhibit heat transfer and may ultimately ruin the cooling system
- Silicates can be abrasive – particularly as coolant ages – potentially leading to pump seal failure, as well as cracked heads as solids gather at heat surfaces

Maintenance, Testing and Ongoing Support

Recognizing the high cost of downtime, Dow offers NORKOOL™ customers a complimentary annual testing program* with data and expertise designed to help maintain fluids at peak operating condition and keep systems running smoothly.

Free sample kits containing bottles, labels and a shipping box are provided to ship samples directly to our state-of-the-art, dedicated laboratory. There, a series of tests is performed to evaluate the fluid's current condition. Dow experts continue to analyze your coolant every 12 months to ensure inhibitor potency and freeze protection are maintained at desired levels.

Comprehensive Solutions for Market Needs

Dow is committed to maximizing value for our customers by offering innovative, customized solutions tailored to the ever-evolving needs of the oil and gas industry. Backed by the extensive resources and global footprint of The Dow Chemical Company, Dow Oil & Gas offers advanced chemical innovation, intimate industry knowledge and exceptional service.

**Installations using 250 gallons or more of NORKOOL™ coolant are eligible to receive Dow's free annual coolant analytical service.*

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Learn more about Dow's comprehensive solutions for the oil and gas industry at www.dowoilandgas.com.

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