T.F. HUDGINS® INCORPORATED
an Allied Reliability brand

TFH™ SYNTHETIC LUBE MIST OIL

Advanced Synthetic Lubricant for all Oil Mist Lubrication Systems

TFH Synthetic Lube Mist Oils are advanced lubricants designed to deliver the highest performance in oil mist applications.

They are specifically tailored for use in oil mist systems and offer distinct advantages over mineral oils or polyalphaolefin (PAO) based lubricants, including:

1. **Optimized Properties for Oil Mist Systems**
   Unlike lubricants designed for flooded lubrication, TFH Synthetic Lube Mist Oil is formulated to meet the unique requirements of oil mist systems. These systems atomize the lubricant into a fine mist, which requires different characteristics from the oil for optimal performance.
2. **Tailored Lubricant Properties**
   TFH Synthetic Lube Mist Oil is designed to atomize effectively, maintain stability in mist form, and provide adequate lubrication to components.

Demonstrated Enhanced Performance
Users have recognized that lubricants optimized for flooded systems might not perform optimally in oil mist systems due to differences in lubrication methods and system requirements. TFH Synthetic Lube Mist Oil has been shown to address the challenges specific to oil mist lubrication, resulting in improved system operation and potentially longer equipment life.

3. **Improved Efficiency**
   TFH Synthetic Lube Mist Oil contributes to enhanced efficiency in oil mist systems by ensuring proper lubrication, reducing mist-related issues, and extending the service life of components.

APPLICATIONS

- All oil mist lubrication systems
- Electric motors and pumps
- Cooling tower gearboxes
- Circulating oil systems

BENEFITS

- Long oil life
- Exceptional resistance to thermal and chemical breakdown
- Resists the formation of deposits
- Extends drain intervals
- Reduces power consumption
- Decreases lubricant consumption
- Good misting and reclassification properties
- Dewaxed for premium low-temperature performance

PROPERTIES FOR CLEAN OPERATION & EFFECTIVE LUBRICATION

TFH Synthetic Lube Mist Oil promotes cleaner operation and more effective lubrication. Its inherent detergency, solvency, and dispersency contribute to enhanced overall performance.

Detergency. Varnish, sludge, contaminants, and wax build-up can impede system performance and efficiency. TFH Synthetic Lube Mist Oil has the ability to remove and deter the accumulation of these harmful deposits.

Solvency. Solvency refers to the ability of an oil to surround or dissolve another type of substance at a molecular level. TFH Synthetic Lube Mist Oil has excellent solvency, enabling it to break down and remove undesirable deposits and contaminants from the system.

Dispersency. Dispersency is the ability to distribute or disperse particles evenly within a medium. The dispersency of TFH Synthetic Lube Mist Oil helps ensure that any dissolved or broken-down contaminants remain suspended rather than settling or re-agglomerating, allowing for easier removal.

MINERAL-TO-SYNTHETIC OIL TRANSITION

The properties of TFH Synthetic Lube Mist Oil are especially beneficial when transitioning from mineral-based oils. Systems previously using mineral oils may have accumulated several types of residues over time that negatively impact their performance. The natural detergency, solvency, and dispersency of TFH Synthetic Lube Mist Oil can help purge and cleanse the system, resulting in improved operation and lubrication.

It is important to note that while these properties sound promising, the effectiveness of TFH Synthetic Lube Mist Oil in a given application may vary based on specific system requirements, operating conditions, and the extent of contamination. Regular maintenance and adherence to manufacturer guidelines for oil selection and system cleaning are crucial for optimal performance and longevity.

GRADES

TFH Synthetic Lube Mist Oil is available in ISO 68 (TFH Synthetic Lube Mist Oil 68) and ISO 100 (TFH Synthetic Lube Mist Oil 100) viscosity grades.

These oils conform to the ISO (International Standards Organization) viscosity classification system. Grades 68 and 100 are typically used in pure oil mist (dry sump) applications.

DELIVERY & STORAGE

Standard packaging is in drums, with options for supply in bulk and totes on a global distribution basis. The recommended shelf life is four years.

TYPICAL PHYSICAL CHARACTERISTICS

TFH™ Lube Mist Oils			68	100
ISO Viscosity Grade (ISO 3448)			68	100
Kinematic viscosity (ASTM D445)				
	@ 40 °C	mm^2/s	68	100
	@ 100 °C	mm^2/s	8.9	11.5
Density at 15 °C (ASTM D1298)		kg/m^3	880	884
Flash point COC (ASTM D92)		°C	240	240
Pour point (ASTM D97)		°C	-30	-24
Ash, sulphated (DIN 51575)		%	0.43	-
Oxidation stability (delta-CCT) (DIN 51352-1)		%	0.45	-
Water separability (ASTM D 1401)				
	@ 54 °C	min	25	-
	@ 82 °C	min	-	15
Copper Corrosion (ASTM D130)	@ 100 °C		1b	1b

TFH™ SYNTHETIC LUBE MIST OIL is compatible with conventional low solvency mineral oils and PAO synthetics. Neither separation nor undesirable reactions occur when the products are mixed. TFH LUBE MIST OIL is compatible with commonly found paints, plastics and metals. Some polymers used in O-ring seals will swell with contact with TFH LUBE MIST OIL. Experience shows that swelling of O-ring seals is generally more beneficial than the shrinkage that can occur with PAO-based lubricants.