Description:
TOR H$_2$O$_x$ HV is a molybdenum based friction modifier that uses water as a carrier. It was developed specifically to address the need for an enhanced water-based top of rail friction modifier for longer carry distances. TOR H$_2$O$_x$ HV formulation is non-hazardous per OSHA and designed to adhere to the rail. This characteristic allows less material consumption for same benefit as traditional water-based friction modifiers. The formulation also does not require additional agitation to remain stable across a wide temperature range.

Applications:
TOR H$_2$O$_x$ HV is an all-weather friction modifier for top of rails. It is specifically designed for use with Loram’s trackside and switching yard applicators. With controlled application rates, TOR H$_2$O$_x$ HV reduces lateral curving forces and top of rail friction levels. Main benefits of using TOR H$_2$O$_x$ HV are increased fuel efficiency, increased rail life, increased safety (reduced derailment forces), and reduced track component wear. TOR H$_2$O$_x$ HV users benefit from longer carry down distances (4+ miles) thus requiring fewer trackside units and associated operating costs. TOR H$_2$O$_x$ HV is field tested to carry down 1+ mile in downhill applications.

Physical Properties:
- Boiling Point: >212°F (>100°C)
- Specific Gravity: 1.11 – 1.17 (Kg/Liter)
- Weight per Gallon (US): 9.24 – 9.75 pounds/gallon (US)
- Viscosity: > 500 cst @ 22°C
- Appearance: Viscous, dark grey to black liquid
- Odor: None
- Solubility in Water: Miscible in water
- Incompatibilities: Oxidizing materials, acids, alkali metals, metal hydrides and zirconium
- Flammability: Non-flammable, non-combustible
- Stability: Stable under normal handling conditions
- Corrosive: Non-corrosive