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## Series CS-2033, CS-2233 and CS-2733 2-Stage Hydrocracked Ammonia Refrigeration Compressor Fluid

Series CS-2033, CS-2233 and CS-2733 represent the next generation of 2-stage hydrocracked ammonia refrigeration fluids. These fluids utilize an enhanced version of the technology used by most OEMs. They offer lower solubility with ammonia, less oil carryover and better pumpability, even under extremely low-temperature conditions.

Series CS-2033, CS-2233, and CS-2733 are also completely top-off compatible with most normal paraffinics, naphthenics, alkyl benzenes, PAOs, and single-stage hydrocracked products.

Series CS-2033's pour point of -46°F is directly equivalent to Frick #9, FES #1 and Vilter-717. Series CS-2733's pour point of -76°F is directly equivalent to Frick #11 and Vilter-HCL 68.

## **ATTRIBUTES**

- Specifically designed for use in ammonia refrigeration compressors
- · Very low volatility, resulting in less carryover to the evaporators
- · Excellent thermal and oxidative stability leading to longer fluid life and extended oil drain intervals
- · Very low solubility with ammonia
- · Increased protection against rust, corrosion, carbon, and varnish
- · Non-Toxic / Non-Hazardous
- Very high viscosity index for superior pumpability at lower temps and better protection at high temps
- Excellent film strength and anti-wear properties for better protection of compressor parts
- Very high flash points and auto-ignition points for added safety

## **TYPICAL PROPERTIES**

Lubrication Properties	CS-2033	CS-2233	CS-2733
Viscosity Index	123	121	112
Viscosity cSt @40°C	68.4	66.0	68.0
Viscosity cSt @100°C	9.7	9.4	9.2
Flash Point °F	465	460	458
Auto-Ignition Point °F	715	710	708
Pour Point °F	-46	-55	-76
Copper Corrosion, 24 Hr	1a	1a	1a
Demulsibility, 130°F, 30 min	40/40/0	40/40/0	40/40/0
Color	<.5	<.5	<.5