



## **700 ALITHICON** **SYNTHETIC HEAT TRANSFER FLUID**

THE 700 ALITHICON IS A SYNTHETIC HEAT TRANSFER FLUID, WHICH IS FORMULATED TO PROVIDE EXTRA LONG SERVICE LIFE IN HIGH TEMPERATURE SYSTEMS. ITS PHYSICAL CHARACTERISTICS MAKE THE 700 ALITHICON THE IDEAL FLUID FOR USE IN HEAT TRANSFER SYSTEMS OPERATING IN TEMPERATURE RANGES ABOVE THOSE AT WHICH PETROLEUM OIL WILL NOT PERFORM SATISFACTORILY (ABOVE 400° F.).

THE ALITHICON SYNTHETIC HEAT TRANSFER IS HIGHLY RESISTANT TO THERMAL CRACKING, WHICH RESULTS IN THE FORMATION OF COKE. IT IS ALSO HIGHLY RESISTANT TO OXIDATION THICKENING. THE DISTILLATION POINT OF THE 700 ALITHICON ALLOWS SYSTEM TEMPERATURES TO OPERATE AT MAXIMUM PERFORMANCE WHEN HEAT TRANSFER SYSTEMS REACH TEMPERATURES OF, AS MUCH AS, 700° F., WITH MINIMAL VAPOR PRESSURE.

THE 700 ALITHICON SYNTHETIC HEAT TRANSFER FLUID IS FORMULATED FROM A TECHNICAL GRADE. SYNTHETIC WHITE OIL, WHICH MEETS FDA/USDA SPECIFICATIONS FOR USE TO LUBRICATE MACHINERY IN FEDERALLY INSPECTED MEAT AND POULTRY PLANTS. IT IS ALSO NON-TOXIC AND DUE TO A LONGER USE LIFE, BETWEEN FLUID CHANGES, IS CLASSIFIED AS, ENVIRONMENTALLY FRIENDLY.

WHEN USING THE 700 ALITHICON SYNTHETIC HEAT TRANSFER FLUID, THE USER CAN EXPECT THE ELIMINATION OF "COKING" OR "SOOTY CARBON" BUILDUP WITHIN THE SYSTEM, AS I NORMALLY FOUND WHEN USING A NORMAL PETROLEUM OIL. DRAIN OR FLUID CHANGE INTERVALS CAN BE EXTENDED AS MUCH AS 600%. PERIODIC FLUID ANALYSIS IS RECOMMENDED WHEN EXTENDING DRAIN INTERVALS.

### **USER BENEFITS:**

- \* FORMULATED FOR USE IN APPLICATIONS WHICH OPERATE IN SYSTEMS OF UP TO 700° F.
- \* ELIMINATES "COKING" AND "SOOTY CARBON" BUILD-UP WITHIN THE SYSTEM
- \* FORMULATED WITH FDA/USDA APPROVED TYPE FLUID
- \* EXCELLENT FOR USE IN FEDERALLY INSPECTED MEAT AND POULTRY PLANTS
- \* NON-CORROSIVE
- \* FULLY COMPATIBLE WITH COMMONLY USED SEAL MATERIALS
- \* LOW VOLATILITY - REDUCED VAPOR PRESSURE
- \* SUPERIOR THERMAL CONDUCTIVITY
- \* EXTENDED CHANGE / DRAIN INTERVALS OF UP TO 600% LONGER
- \* CLASSIFIED AS AN ENVIRONMENTALLY FRIENDLY FLUID, DUE TO EXTENDED DRAIN INTERVALS

**APPLICATIONS:** FLUID FOR HEAT TRANSFER SYSTEMS

**FOR PACKAGING AND TECHNICAL SPECIFICATIONS, SEE REVERSE SIDE**

**700 ALITHICON SYNTHETIC HEAT TRANSFER FLUID**  
**TYPICAL SPECIFICATIONS AND TEST RESULTS**

<b>PRODUCT CODE</b>	<b>700</b>
BASE FEED STOCK	NF/USP GRADE WHITE MINERAL
APPEARANCE	BRIGHT, CLEAR, COLORLESS
ODOR	NONE
TASTE	NONE
POUR POINT, ° F. (ASTM D-97)	-90
FLASH POINT, COC, ° F. (ASTM D-92)	470
DENSITY @ 60° F., gr / ml (ASTM D-972)	0.83
AUTOIGNITION TEMPERATURE (ASTM -2155)	710° F
EVAPORATION LOSS, N <sup>2</sup> ATMOSPHERE 760 mm, 6.5 hrs @ 400° F, wt % (ASTM D-972)	4.0
THERMAL CONDUCTIVITY @ 300° F., BTU / hr ft <sup>2</sup> - ° F / in	.085
SPECIFIED HEAT, BTU / lb - ° F. 200° F. 300° F. 400° F. 500° F. 600° F.	.48 .54 .59 .64 .70
COEFFICIENT THERMAL EXPANSION @ 55° F.	0.0045
VAPOR P <sup>2</sup> @ 300° F (ASTM D-2897)	0.7 mm / hg
KINEMATIC VISCOSITY cst @ 40° C. (ASTM D-445)	29
KINEMATIC VISCOSITY cst @ 100° C. (ASTM D-445)	4.8
KINEMATIC VISCOSITY sus @ 100° F. (ASTM D-445)	149
KINEMATIC VISCOSITY sus @ 210° F. (ASTM D-445)	42
VISCOSITY INDEX (ASTM D-2270)	168
SURFACE TENSION, dy / cm @ 68° F. (ASTMD-1331)	30

**AVAILABLE PACKAGING:**

- \* 6 / 1 gals CASE                      \* 6 gal PAIL                      \* 55 gal DRUM
- \* 330 gal DISPOSABLE TOTE TANKS                      \* BULK

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