

## KOSTChill™ EG HD Heat Transfer Fluid

**KOSTChill EG HD Heat Transfer Fluid** is a fully-formulated ethylene glycol-based heat transfer fluid containing an inhibitor and additive package that controls corrosion of metals, helps prevent scaling and the fouling of heat transfer surfaces, and buffers the pH to maintain it in the optimum operating range. It was specifically designed for use in heavy-duty industrial applications, such as in heating and cooling systems in refineries and chemical plants. It meets or exceeds ASTM D 1384, the accepted industry standard for multi-metal corrosion test, for steel, cast iron, aluminum, copper, brass and solder. This fluid is also compatible with most plastics, elastomers, and types of rubber. This engineered inhibitor system formulation makes **KOSTChill EG HD Heat Transfer Fluid** equivalent or better in terms of functionality and performance to the very best national brands on the market today. It is also stable when mixed with water containing up to 350 ppm total hardness.

**KOSTChill EG HD Heat Transfer Fluid** has a recommended operating temperature range of -60°F to 350°F when mixed with appropriate water concentrations. To obtain adequate freeze protection, select a glycol concentration with a freeze point at least 5°F below the lowest anticipated ambient temperature. It should never be diluted below 25% to maintain adequate corrosion protection.

KOST USA recommends the use of deionized or distilled water for dilution. However, tap water, well water or city water may be used when it meets the quality standards. **KOSTChill EG HD Heat Transfer Fluid** contains ingredients that help prevent water hardness compounds from reacting with the inhibitors/additive package to form precipitates, which can form corrosion promoting and heat transfer limiting deposits. It is recommended that water with no more than 350 ppm hardness be used to dilute concentrate or as make-up water for systems. Chlorides and sulfates are usually present in municipal water and should be limited to levels no greater than 50 ppm.

**KOSTChill EG HD Heat Transfer Fluids** are also available in pre-diluted concentrations with the same performance characteristics as the KOSTChill EG HD, but has already been diluted with deionized water for ready to use requirements. Other dilution concentrations are available upon request.

### Typical Applications:

- Natural Gas Pipeline Heaters and Bath Heaters
- Cooling Systems for Electrical Generator Engines
- Refinery/Chemical Plant Heating/Cooling Systems
- Power Plant Combustion Air Preheaters
- Pulp/Paper Processing Heating/Cooling Systems
- General Electric GEI 41004H (Cooling Water for GE Gas Turbine Power Systems)



# KOSTChill™ EG HD Heat Transfer Fluid

Typical Properties	Full Strength	70/30	60/40	50/50	30/70
Ethylene Glycol, % wt	96	69	59	49	30
Inhibitors and Water, % wt	4	31	41	51	70
Specific Gravity (60/60 °F)	1.130	1.090	1.078	1.065	1.039
pH of Solution	10.8	10.5	10.6	10.5	10.5
Reserve Alkalinity, ml	14	10	8	7	7
Freeze Point, °C (°F)		-62 (-80)	-52 (62)	-37 (-34)	-16 (+3)
Thermal Conductivity (BTU/hr-ft3) @ 180°F	0.152	0.198	0.217	0.239	0.293
Specific Heat (BTU/lb-°F) @ 180°F	0.655	0.770	0.820	0.853	0.920
<i>Other chemical and engineering specifications are available upon request.</i>					
<b>PRODUCT CODE:</b>	<b>2522</b>	<b>2530</b>	<b>2575</b>	<b>2523</b>	<b>2539</b>

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1000 Tennessee Ave. Cincinnati, OH 45229  
(800) 661-9391 | kostusa.com



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