THERMAL CHARGE®

PEAK

HEAT TRANSFER FLUIDS

CATALOG

THERMAL CHARGE®

MECHANICAL HVAC APPLICATIONS

Thermal Charge® industrial fluids are widely used in mechanical HVAC applications for secondary cooling, burst and freeze protection of pipes, and for various deicing, defrosting, and dehumidifying applications.

Using properly inhibited glycol-based heat transfer fluids, such as Thermal Charge®, overcomes water's deficiencies and offers the most effective combination of both corrosion protection and freeze protection.

The Thermal Charge® product line is a family of inhibited PG and EG fluids. All Thermal Charge® fluids contain specially formulated inhibitor packages that provide protection against corrosion and improved operating efficiency over water or glycol alone.

THERMAL CHARGE® PG

THERMAL CHARGE® PG is a propylene glycol-based fluid that contains a specially formulated package of industrial inhibitors that help prevent corrosion. Because propylene glycol fluids have a lower acute oral toxicity compared to ethylene glycol-based formulas, THERMAL CHARGE® PG is often used in applications where incidental contact with food or beverage products could potentially occur. This product is available in clear/colorless, orange, blue, and pink*

**Blue and Pink available in select dilutions.*

The fluid is manufactured with ingredients classified as Generally Recognized as Safe (GRAS) by the FDA and is recommended for use within food & beverage processing area where incidental contact with food may occur. Only products bearing the NSF Mark are registered with NSF.
Note: please reference specification sheet.

THERMAL CHARGE® EG

THERMAL CHARGE® EG is an ethylene glycol-based fluid that is widely used for heating applications and secondary cooling, for burst and freeze protection of pipes, and for various deicing, defrosting, and dehumidifying applications. This product is fluorescent pink and used for leak detection.

THERMAL CHARGE® PGHD

THERMAL CHARGE® PGHD heat transfer fluid is a formulation of 94%-95% propylene glycol and a specially formulated package of industrial inhibitors. THERMAL CHARGE® PGHD is often used in higher temperature applications and solar systems and is well suited for HVAC applications because its inhibitor package offers additional corrosion protection for systems containing copper components. This product is fluorescent yellow.

THERMAL CHARGE®EGHD

Thermal Charge® EGHD heat transfer fluid is a heavy duty formulation of ethylene glycol and a specially formulated package of industrial corrosion inhibitors for use in closed systems with copper and other metal components, and for systems that require reliability in higher temperature operations. The fluid is dyed fluorescent orange to aid in leak detection.

THERMAL CHARGE®

HEAT TRANSFER FLUIDS

The PEAK® Thermal Charge® brand of heat transfer fluids offers a wide range of products in mechanical HVAC applications such as heat exchangers, boilers, cooling towers and chillers, insulation or trace line heating for gathering and transmission lines, and tank and vessel heating.

MECHANICAL HVAC

PRIMARY HVAC EQUIPMENT WHERE HTF'S ARE USED

	CHILLERS	HEAT PUMPS
FUNCTION /PURPOSE	Refrigeration system that cools a process fluid or dehumidifies air using a vapor compression or absorption cycle to cool.	Device that transfers heat energy from a source of heat to a destination called a "heat sink"
PRIMARY APPLICATIONS	• Thermal energy storage aka Ice making • Ice rinks • Hospitals • Schools • Large buildings • Power plants • Petroleum refineries • Petrochemical plants • Natural gas processing plants • Food processing plants • Other industrial facilities • Additional process cooling for cooling towers	• Geothermal heating • Groundwarmers • Radiant floor heating - hydronic • Snowmelt systems

TYPICAL PROPERTIES	THERMALCHARGE® PG	THERMALCHARGE® PGHD	THERMALCHARGE® EG	THERMALCHARGE® EGHD
Glycol, % volume	96-97	95-96	96-97	93-94
Inhibitors and Water, % volume	3-4	4-5	3-4	6-7
Color	CLEAR/COLORLESS	FLUORESCENT YELLOW	FLUORESCENT PINK	FLUORESCENT ORANGE
Specific Gravity (60/60° F)	1.050 - 1.060	1.058 - 1.068	1.125 - 1.135	1.123 - 1.163
pH of Solution Containing 50% Glycol	9.0 - 10.0	9.5 - 10.5	9.0 - 9.6	9.0 - 10.5
Reserve Alkalinity, ml	10 ML MIN	15 ML MIN	11 ML MIN	25 ML MIN
Burst Protection at 50/50 Down to, (F)	-60	-60	-60	-60

The PEAK® Thermal Charge® family of inhibited glycol-based heat trasfer fluids are manufactured with the highest quality raw materials. Each is specially formulated with state-of-the-art inhibitor packages that prevent corrosion, which minimizes fluid expense and extends fluid life. Products are available in customizable colors and dilution percentages.

DILUTION %

PRODUCT	30	35	40	45	50	55	60	65	70	CONCENTRATE
Thermal Charge® EG	•	•	•	•	•	•	•	•	•	•
Thermal Charge® PG	•	•	•	•	•	•	•	•	•	•
Thermal Charge® PGHD	•	•	•	•	•	•	•	•	•	•
Thermal Charge® EGHD	•	•	•	•	•	•	•	•	•	•

Package Sizes Available: Pails*, Drum, Tote and Bulk

** Pails available in 50/50 and Concentrate*

THERMAL CHARGE®

STATIONARY ENGINES

THERMAL CHARGE® industrial fluids used in oil & gas applications are specially formulated to protect large, stationary diesel engines — including engines used in gas transmission compressor station service — against overheating, winter freeze-ups and corrosion.

STATIONARY ENGINES

Stationary engines are used throughout the upstream, midstream and downstream process. The engines run various pipeline equipment that control the optimal pressure, volume and temperature operating parameters for the oil and gas fluid to flow.

- Oil Power Stations
- Drill Sites
- Regulator Stations
- Compressor Stations
- Cryogenic Gas Processing Facilities

THERMAL CHARGE® EGSE

Ethylene glycol-based coolant formulated with nitrite to protect against cylinder liner pitting, crevice corrosion and cavitation; Phosphate-free formula that meets ASTM D6210 requirements.

THERMAL CHARGE® PGSE

Propylene glycol-based coolant used where lower toxicity fluids* are required. It is formulated with nitrite to protect against cylinder liner pitting, crevice corrosion and cavitation; Phosphate-free formula that meets ASTM D6210 requirements.

** As compared to ethylene glycol-based formulas.*

THERMAL CHARGE® XL

Ethylene glycol-based coolant utilizing organic acid technology that delivers total system protection for 20,000+ hours. Borate, phosphate, nitrite and silicate-free formulation that meets ASTM D6210 requirements.

THERMAL CHARGE® XL NOAT

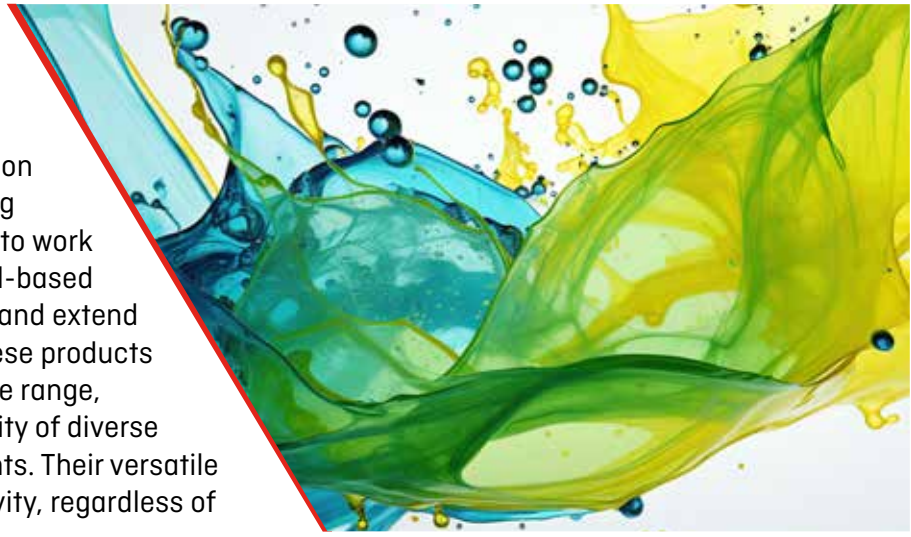
Ethylene glycol-based coolant formulated with nitrited organic acid technology that delivers total system protection for 15,000+ hours; Phosphate-free formula that meets ASTM D6210 requirements. Also silicate-free and borate-free.

Package Sizes Available: Drums, Totes and Bulk in Various Dilution Percentages.

THERMAL CHARGE®

HEAT TRANSFER FLUID INHIBITORS

Introducing our latest innovation in heat transfer fluid technology: advanced inhibitor products designed to boost the performance and longevity of your thermal management systems. These enhanced formulations offer superior corrosion protection for multi-metal systems while minimizing scale buildup on heat transfer surfaces. Developed to work seamlessly with both ethylene and propylene glycol-based fluids, our new inhibitors ensure optimal efficiency and extend the service life of your heat transfer equipment. These products provide robust protection across a wide temperature range, making it an ideal choice for maintaining the integrity of diverse thermal systems in various operational environments. Their versatile performance ensures optimal efficiency and longevity, regardless of the specific application or industry.



THERMAL CHARGE® HD REINHIBITOR

Fully formulated, inhibitor package that, when added at the recommended treat rate to the appropriate water and glycol mix, will formulate a premium heavy duty heat transfer fluid. It can also be used in existing inhibited fluid to boost performance as inhibitors deplete over time, essentially extending change-out intervals.

THERMAL CHARGE® SE INHIBITOR

Fully formulated inhibitor package designed to reinvigorate and extend the service life of existing heat transfer fluids. As original inhibitors become depleted over time, this innovative solution boosts fluid performance, helping to maximize change-out intervals and maintain critical corrosion protection for stationary engines, boilers, and other mission-critical industrial equipment.

THERMAL CHARGE® HTX-1 INHIBITOR

Fully formulated, food-grade inhibitor package that, when added at the recommended treat rate to the appropriate amount of water and propylene glycol, will formulate a premium heat transfer fluid suitable for applications where incidental contact with food may occur. It can also be used in existing inhibited fluid to boost performance as inhibitors deplete over time, thus extending change-out intervals.

The fluid is manufactured with ingredients classified as Generally Recognized as Safe (GRAS) by the FDA and is recommended for use within food & beverage processing area where incidental contact with food may occur. Only products bearing the NSF Mark are registered with NSF.
Note: please reference specification sheet.

PROPERTIES			
FORMULA	**COLOR**	**SPECIFIC GRAVITY @ 60/60°F**	**PH**
THERMAL CHARGE® HD Inhibitor	Clear	1.2 - 1.3	10.15 - 10.85
THERMAL CHARGE® SE Inhibitor	Fuchsia	12.15 - 12.18	12.75 - 13.45
THERMAL CHARGE® HTX-1 Inhibitor	Clear	1.2-1.3	10 - 11

Package Sizes Available: Pails, Drum, Tote and Bulk

THERMAL CHARGE®

MILD-ACID ALKALINE-BASED CHELATING CLEANERS

THERMAL CHARGE® Mild-Acid Chelating Cleaner & THERMAL CHARGE® Alkaline-Based Chelating Cleaner are effective in removing heavy rust, scale, system deposits, oil, and fuel contamination from cooling or heat transfer systems. Once a cooling or heat transfer system is contaminated, water alone cannot clean the system. When used as directed, these cleaners address a wide range of contamination without harming the metal surfaces, gaskets, hoses, or plastic components.

- When used as directed, removes heavy corrosion, scale deposits, and oil contamination. Please refer to the respective performance chart for best results.
- When used as directed, removes contaminants without damaging system metals or elastomers, cleans cooling systems without leaving a film on heat transfer surfaces, and is an aluminum safe technology.

THERMAL CHARGE® MILD-ACID CHELATING CLEANER

THERMAL CHARGE® Mild-Acid Chelating Cleaner is effective in cleaning heavy rust, scale, system deposits, oil, and fuel contamination within the below cooling or heat transfer systems.

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THERMAL CHARGE® ALKALINE-BASED CHELATING CLEANER

THERMAL CHARGE® Alkaline-Based Chelating Cleaner is effective in cleaning silicate gel, oil contamination and solder bloom within heavy and light duty cooling systems.

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Package Sizes Available: Drums, Totes and Bulk in Various Dilution Percentages.

PROBLEM	MILD-ACID CHELATING CLEANER	ALKALINE-BASED CHELATING CLEANER
Scale Deposits	EXCELLENT	POOR
Rust & Corrosion	EXCELLENT	POOR
Motor Oil, Grease & Fuel	GOOD	EXCELLENT
Machining Oil	GOOD	EXCELLENT
Solder Bloom	GOOD	POOR
Silicate Gel	POOR	EXCELLENT

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THERMAL CHARGE®

FLUID ANALYSIS PROGRAM

Make comprehensive fluid analysis service part of regular check-ups to make sure your system fluids are consistently performing at a superior level.

- Fluid Monitoring
- Levels of Metals
- Inhibitor Levels
- Thermal Protection
- Foreign Substance Detection
- System Volumes
- Fluid Maintenance Recommendations
- Percentage of Glycol
- Proper Corrosion Protection Limits
- Unit Identification

FLUID ANALYSIS PROGRAM PROCESS

1. **Collect a fluid sample**
   We can provide pre-made sample kits or customers can use their own.
2. **Complete the shipping kit form**
3. **Send the sample to our state-of-the-art lab**
4. **Samples are tested**
   A highly trained OWI lab technician will analyze the sample in OWI's state-of-the-art in-house laboratory.
5. **Results are delivered**
   A detailed explanation of our results are provided to the customer as well as a customized recommendation based on the condition of each sample.

For Customer Service or Technical Assistance Call: 1-800-477-5847

ORDER THERMAL CHARGE® AND GET PEACE OF MIND

Different industries have different ideal operating conditions. Maintaining that ideal is where we come in. For more than 50 years, PEAK® Commercial & Industrial's complete line of THERMAL CHARGE® industrial fluids has been ensuring your valuable equipment stays protected—no matter the task, thermal extreme, occupation or environmental requirement. We've built a reputation on reliable performance, cost-effectiveness, and delivering the ultimate benefit: peace of mind.

www.thermalcharge.com

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HEAT TRANSFER FLUIDS

Questions
Customer Service
or
Technical Assistance

Call: 1-800-477-5847

Or visit www.thermalcharge.com

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