SHELL INDUSTRIAL HTF

Heat transfer fluids (conventional)

Product Description

Shell Industrial HTF Heat Transfer Fluids are a series of conventional technology, high quality, industrial coolant/antifreeze and heat transfer fluids.

- **Shell Industrial HTF E 100** is a concentrated high quality, single phase, inhibited ***ethylene glycol*** based product suitable for use as a heavy duty industrial coolant/antifreeze and heat transfer fluid. **Shell Industrial HTF E 105** is a 50/50 volume mixture of Shell Industrial HTF E 100 and deionized water.
- **Shell Industrial HTF P 150** is a concentrated high quality, single phase, inhibited ***propylene glycol*** based product suitable for use as a heavy duty industrial coolant/antifreeze and heat transfer fluid.
- **Shell Industrial HTF P 200** is a concentrated, high quality, single phase, inhibited ***propylene glycol (USP)*** based product suitable for use as a heavy duty industrial coolant/antifreeze and heat transfer fluid.

All **Shell Industrial HTF** fluids are free of silicate, nitrites or amines. A foam inhibitor is added to minimize foaming tendencies during service. **Shell Industrial HTF** fluids are formulated to protect against corrosion of all metals commonly found in industrial cooling and heating systems. These products mix readily with clean tap water and are compatible with cooling system filters and supplemental coolant additives.

Applications

- **Shell Industrial HTF E 100 and E 105** can be used in stationary engine applications such as natural gas processing, irrigation, power generation, oil field operations and portable air compressor applications. These fluids can also be used in heat transfer applications such as line heaters, snow melting systems, loading ramps, walkways, highways and airfield runways. Other unique applications where HTF E 100 and HTF E 105 fluids can be used are as coolants in ice-skating rinks and air conditioning units.
- **Shell Industrial HTF P 150** can be used in environmentally sensitive areas because of its propylene glycol base fluid. This fluid can be used in stationary engine applications such as natural gas processing, irrigation, power generation, oil field operations and portable air compressor applications. This fluid can also be used in heat transfer applications such as line heaters, snow melting systems, loading ramps, walkways, highways and airfield runways. Other unique applications where HTF P 150 fluids can be used are as a coolant in ice-skating rinks, air conditioning units and as recreational vehicle antifreeze.
- **Shell Industrial HTF P 200** is an inhibited USP propylene glycol based fluid that is used as an industrial coolant and heat transfer fluid. HTF P 200 is also suitable for winterizing all types of non-potable water plumbing systems including those in boats, trailers, vacation homes and recreational vehicles. This product is not intended as a food additive or component.

NOTE: Shell Industrial HTF fluids **are not to be used to protect the inside of potable water systems against freezing.**
NOTE: Shell Industrial HTF fluids **should not be used in automotive or heavy-duty diesel engine cooling system applications.**

All Shell Industrial HTF fluids **should be tested once per year to check correct inhibitor concentration. Check with your Shell representative to find out about Shell testing and coolant/antifreeze refortification programs. If you are a Shell Distributor, please call 1+800-468-6457. All other customers, please call 1+800-840-5737.**

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Features and Benefits

Shell Industrial HTF fluids provide the following benefits:

- excellent corrosion protection for all cooling system metals and components, such as cast iron, steel, copper, brass and solder
- excellent heat transfer properties due to silicate free formula
- ability to choose between ethylene glycol and propylene glycol based fluids
- products that are silicate, nitrite, borate and amine free
- 100% biodegradable in their pure and unused form

Approvals and Recommendations

Shell Industrial HTF E 100 and E 105 meet or exceed the performance requirements of:

- Caterpillar, Cummins and Waukesha stationary engines.

Shell Industrial HTF P 150 meets or exceeds the performance requirements of:

- Caterpillar, Cummins and Waukesha stationary engines.

Typical Characteristics of Shell Industrial HTF

Shell Industrial HTF E 100 and E 105	Typical Concentrate	Typical Pre-diluted 50/50
Code No.	**94071**	**94072**
Appearance	Pink	Pink
Specific gravity 60/60 °F	1.13	1.06
Freezing point, °F (ASTM D 1177) 50 vol % q.s. aqueous solution	-34	NA
Freeze point as purchased °F	NA	-34
pH (ASTM D 1287), 1:2 dilution with water	10.5	10.3
Reserve Alkalinity (ASTM D 1121), as received	12.0	6.0
Silicate, % (as Anhydrous Alkali Metasilicate)	None	None

Shell Industrial HTF P 150	Typical Concentrate
Code No.	**94073**
Appearance	Pink
Specific gravity 60/60 °F	1.05
Freezing point, °F (ASTM D 1177) 50 vol % q.s. aqueous solution	-27
pH (ASTM D 1287), 1:2 dilution with water	10.5
Reserve Alkalinity (ASTM D 1121), as received	12.0
Silicate, % (as Anhydrous Alkali Metasilicate)	None

Shell Industrial HTF P 200	Typical Concentrate
Code No.	**94075**
Appearance	Clear
Specific gravity 60/60 °F	1.05
Freezing point, °F (ASTM D 1177) 50 vol % q.s. aqueous solution	-27
pH (ASTM D 1287), 1:2 dilution with water	10.0
Reserve Alkalinity (ASTM D 1121), as received	12.0
Silicate, % (as Anhydrous Alkali Metasilicate)	None

Recommended dilution for **Shell Industrial HTF E 100**

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Boiling Protection, °F (°C) (15 lb pressure cap) 50% (1 part AF/1 part water)	 260 (126.7)
Freezing Protection, °F (°C) 30% (3 parts AF/7 parts water) 40% (2 parts AF/3 parts water) 50% (1 part AF/1 part water) 60% (3 parts AF/2 parts water)	 4 (-15.5) -12 (-24.4) -34 (-37.2) -62 (-52.2)

Recommended dilution for **Shell Industrial HTF P 150 and Shell Industrial HTF P 200**

Boiling Protection, °F (°C) (15 lb pressure cap) 50% (1 part AF/1 part water)	 260 (126.7)
Freezing Protection, °F (°C) 30% (3 parts AF/7 parts water) 40% (2 parts AF/3 parts water) 50% (1 part AF/1 part water) 60% (3 parts AF/2 parts water)	 7 (-13.9) -7 (-21.6) -27 (-32.7) -70 (-56.7)

NOTE: **Shell Industrial HTF E 105** should be used as purchased and not further diluted.

Maintaining Shell Industrial HTF Fluids

1. Check fluid levels at regular intervals and maintain at recommended level.
2. Check freeze-point at least twice per year. Maintain freeze point between -15ºF and -64ºF. Use of a refractometer is recommended for checking freeze point.
3. OEM recommendations should be followed when adding supplemental coolant additives
4. **Shell Industrial HTF** fluids should be tested once per year to confirm coolant condition and to evaluate cooling system for corrosion products and wear metals. A coolant-testing program is available for **Shell Industrial HTF** users. All coolant samples must be submitted in approved containers. Contact your local Shell representative for information.

Handling and Safety Information

Shell Industrial HTF has a shelf life of at least 5 years. Concentrate products should be mixed before use. Always dispose of used coolant in accordance with local, state and federal guidelines. These products are not to be used to protect the inside of potable water systems against freezing. For information on the safe handling and use of this product, refer to its Material Safety Data Sheet at **http://www.shell-lubricants.com/msds/.** If you are a Shell Distributor, please call **1+800-468-6457** for all of your service needs. All other customers, please **call 1+800-840-5737** for all of your service needs. Information is also available on the World Wide Web: **http://www.shell-lubricants.com/.**

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