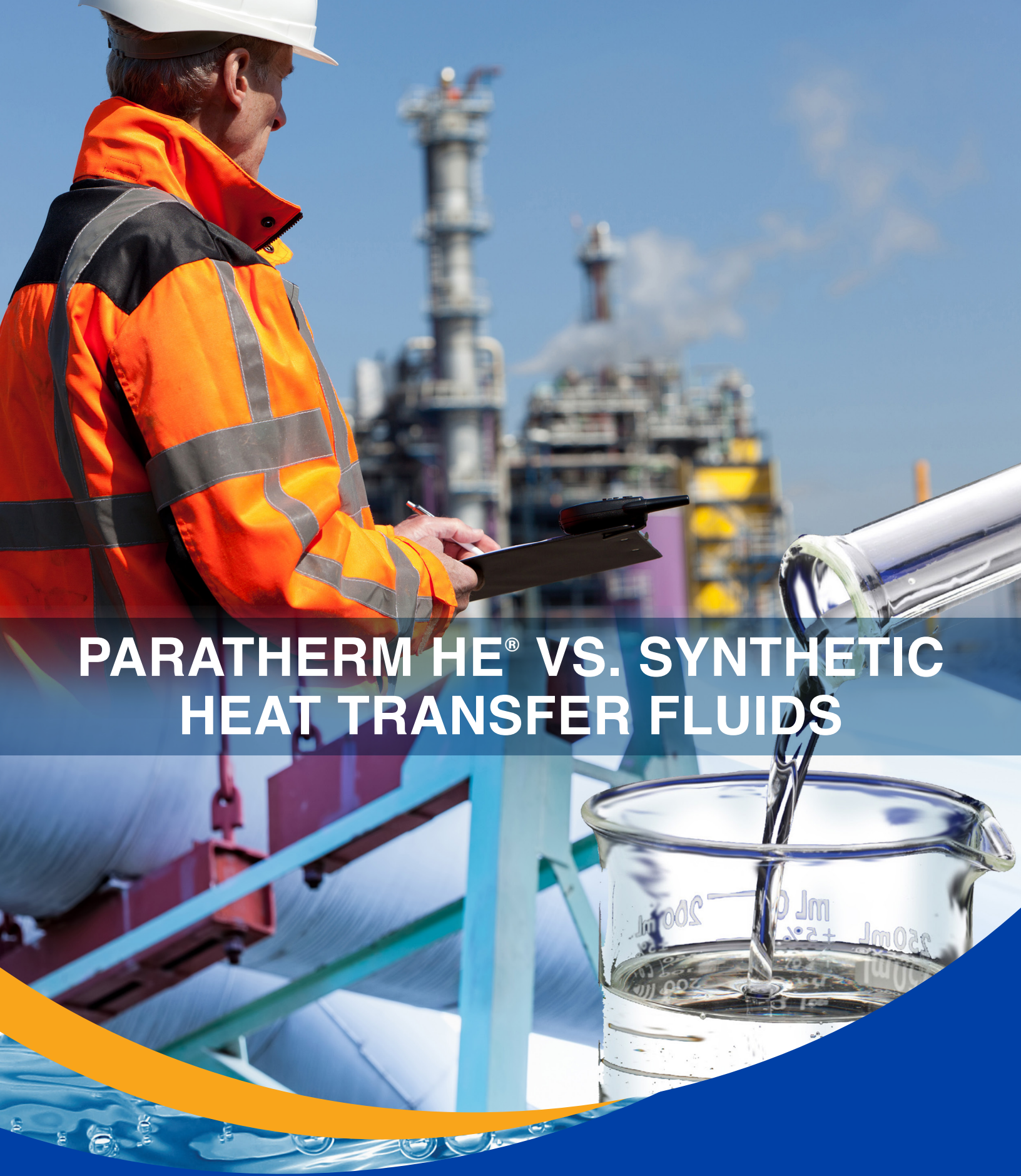

PARATHERM HE® VS. SYNTHETIC HEAT TRANSFER FLUIDS

Paratherm™
HEAT TRANSFER FLUIDS

PARATHERM HE® VS. SYNTHETIC Heat Transfer Fluids

Synthetic aromatic heat transfer fluids continue to hold an important place in liquid heat transfer systems. In our view, synthetics are best specified where natural fluids cannot function: system temperatures at or above 600°F, below room temperature, and, if they are able, where the vapor phase is required.

Below are some of the reasons you might consider a natural heat transfer fluid like the Paratherm HE® high-efficiency fluid.

LOWER COST

Any heat transfer fluid when properly specified and operated within its capabilities, can provide good service for extended periods of time. However, oxidation, overheating and system contamination can cut this life dramatically. The Paratherm HE is a most forgiving fluid, and can provide a service life equal to or greater than many synthetics.

HUMAN SAFETY

While most synthetic fluids are at least moderately toxic, the HE fluid is not toxic. Material Safety Data Sheets for synthetic aromatic fluids indicate that small quantities of benzene gas may form in the expansion tank when these fluids are overheated. And in thermal oil systems, overheating unfortunately does happen.

If you use aromatic fluids, we strongly recommend that you take steps to vent the expansion tank outside, to atmosphere. You might wish to review the fluid's MSDS for toxicity levels. Significant skin dermatitis has been reported with many synthetics.

ENVIRONMENTAL SAFETY/DISPOSAL

While no fluid should be permitted to enter the environment, mishaps can occur. Hazardous waste handling procedures must be observed in the clean-up and disposal of synthetic fluids—including mandatory use of costly certified incinerators and landfills. (The HE fluid has passed rigorous Bioassay testing.)

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Disposal of the HE fluid is safe and easy. It can be burned for BTU value. Or it can be combined with spent lube oils and sent to the local recycler. Used oils destined for disposal have been declared non-hazardous by the EPA (citation: 57FR21524). Paratherm encourages recycling. Processing old material into another usable product helps conserve our natural resources and precious landfill space.

If a release does occur, you can use the same simple clean-up procedures for the HE fluid as you would with light lube oils. These include standard skimming procedures.

LESS ODOR

While synthetic heat transfer fluids are often reported to have moderate to a heavy (sometimes nauseating) odor that permeates and remains in clothing, the HE fluid is virtually odorless.

APPLICATIONS

The HE fluid is being successfully used in a broad variety of demanding applications—from the heating of flatwork ironers in laundries, to control of temperatures in chemical reactors, to platen heating in laminating presses, to the heating of viscous fluids in storage tanks

and on board barges and ships (the HE fluid is approved by the U.S. Coast Guard).

The HE fluid is approved by virtually all thermal fluid system manufactures, and is also recognized by U.L. (Underwriter's Laboratories No. MN17163N).

Founded in 1988, Paratherm—Heat Transfer Fluids has become a leading U.S. manufacturer of specialized heat transfer fluids and system cleaners. The firm offers a wide range of heat transfer fluids (currently 8 fluids and 3 cleaners) covering temperatures from -137°F to +650°F. The company has a network of distributors and warehousing locations throughout North America and globally to offer regional service and quick delivery.

Questions? Please contact Ed Cass, Paratherm Technology Manager — Heat Transfer Fluids, 2009 Renaissance Blvd., King of Prussia, PA 19406 USA. 800-222-3611 or 610-941-4900, (Fax 610-941-9191), info@paratherm.com – www.paratherm.com.