Parallel systems, contrasting results Therminol[®] 66 heat transfer fluid delivers excellent performance for Grupo Primex.

Reliable heat transfer fluids are vital to the ability of manufacturers to operate efficiently and productively. However, some heat transfer fluids can degrade over time, resulting in deteriorating performance and impacting operating costs and product quality. With these possible consequences, how can manufacturers ensure they are choosing the right heat transfer fluid and prevent these problems from occurring?

Grupo Primex (now known as Mexichem)—Latin America's largest manufacturer of PVC resins, phthalic anhydride, plasticizers, and PVC compounds—operates two parallel heat transfer systems that present a unique comparison. Therminol® 66 heat transfer fluid has supported one of these systems for more than 15 years. A diaryl alkyl chemistry product, rated to 350°C (660°F), has been utilized in the second system for five years.

Contrasting results

Since the 1980s, the system supported by Therminol 66 has performed with excellent results when compared to the alternative fluid in a separate heat transfer system.

Francisco Nava, production manager for Grupo Primex at the time of the study, describes the performance concerns of the alternative fluid heat transfer process. "We were experiencing losses in distillation efficiency, increases in system vapor pressures, increased unplanned downtime, and impacts to our finished product quality."

The decision to change

Grupo Primex turned to the Therminol technical support team for a complimentary fluid analysis that is a part of the TLC Total Lifecycle Care® program. According to the analysis completed by the technical

"... customer service—such as that provided by the TLC Total Lifecycle Care program—is invaluable."

THERMINO

Heat Transfer Fluids by Eastman

Francisco Nava, production manager, Grupo Primex

team, the Therminol fluid composition demonstrated greater resistance to chemical changes of concern under the operating conditions of the process, sustaining excellent performance over a longer time period.

"Our system utilizing Therminol 66 heat transfer fluid was operating smoothly. The decision to switch to Therminol 66 in the other system was clear," said Nava.

The transition to Therminol 66 was made in June 2005. Additionally, Therminol FF flushing fluid would be utilized to clean Grupo Primex's second system of the alternative fluid.

Expected results

According to Nava, "In the 15 years that we have operated our system using Therminol 66 heat transfer fluid, we have never experienced downtime or other problems. Cleaning our other system with Therminol FF and switching to Therminol 66 yielded the same consistent, outstanding results for both systems."

Mr. Nava's advice to other manufacturers when choosing a heat transfer fluid: "In addition to looking at the efficiency and life span of the heat transfer fluid, our experience demonstrates that customer service—such as that provided by the TLC Total Lifecycle Care program—is invaluable."

For more information, or to find the sales or technical contact nearest you, visit the "Contact us" page on our website: www.therminol.com.

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