

# Resitol Industria Química, TLC Total Lifecycle Care<sup>®</sup>, and Therminol<sup>®</sup> LT heat transfer fluid **A “cool” combination**

## Resitol Industria Química

Resitol is a chemical company located in Santa Catarina (SC) in the southern part of Brazil. Resitol is a major producer of two products: crude tall oil (CTO) and crude sterol. The tall oil is extracted from by-products of pulp and paper production. Crude sterol (phytosterol) is contained in the tall oil, which after distillation is concentrated in tall oil pitch. To extract the crude sterol, Resitol has a molecular distillation unit which operates under high vacuum. Resitol uses a secondary coolant fluid (SCF) to achieve  $-70^{\circ}\text{C}$ . The very low temperature is required to maximize separation efficiency while reducing the product degradation that would occur if the separation was performed at a higher temperature. The purified sterol is used in the pharmaceutical and food industries. All of Resitol's products are exported to customers in the United States.

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*Charles Souza, maintenance & production manager*

By using secondary coolant system technology rather than direct cooling, this process substantially reduces the amount of refrigerant charge in the main refrigeration loop. This reduction in primary refrigerant benefits Resitol since the use of traditional refrigerants is highly regulated and can be quite costly to own, operate, and maintain. Since 1991, Resitol has used a silicone-based fluid as an SCF. In 2008, they experienced two major leaks from their heat transfer system. As a result of each of these unplanned failures, they were forced to shut down their production since their fluid supplier was not able to deliver enough fluid to replenish their system in a timely manner. After the second incident, Resitol contacted the local Therminol team to help explore their options.

## TLC Total Lifecycle Care

The Therminol heat transfer fluid experts in Brazil were immediately dispatched to meet with the Resitol engineers, employ the services available via the TLC Total Lifecycle Care<sup>®</sup> program, including a review of their system design, and discuss their heat transfer fluid options. The TLC Total Lifecycle Care program was designed to support Therminol customers throughout their systems' lifecycle. This comprehensive program includes services such as system design consultation, start-up assistance, on-site training, sample analysis, and flush and fluid refill assistance. This extraordinary program is backed up by a team of technical industry experts in every major global region.

## Therminol fluids

In October 2009, after in-depth consultation, Resitol engineers decided to change their silicone-based fluid to Therminol LT synthetic heat transfer fluid due to the excellent technical services and logistical support offered by the local TLC Total Lifecycle Care team in Brazil. “Our local Therminol engineers provided us with comprehensive guidance for draining our old fluid, flushing the system, and refilling with the new Therminol LT. They also provided on-site support as needed throughout the process until the system was started up. We have never received this level of expert support with our previous supplier. They also have local stock in case of emergencies,” said Charles Souza, maintenance and production manager for Resitol. Once the system reached stable operation, he added, “Because of Team Therminol's local support and outstanding services, I rest easier knowing that they will be here whenever I need help.”

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