



Reaching New Lows with Solutia's **THERMINOL® VLT**

Fluid helps pharma systems meet
lower-than-ever temperature demands

Solutia Inc. – the leader in the heat transfer fluid industry for more than 50 years – has developed a revolutionary low-temperature fluid to meet the unique needs of the pharmaceutical industry. Leveraging years of experience in manufacturing heat transfer fluids and listening to customer needs, Solutia developed Therminol VLT, ideally suited for single fluid heating and cooling systems between -115 °C (-175 °F) and 175 °C (350 °F).

Trends in the pharmaceutical industry continue to demand systems that can operate at lower-

“We were looking for a low-temperature fluid with the capability of going below -100 °C (-150 °F), in order to scale-up our current processes. We knew Solutia’s Therminol VLT could provide that flexibility, where other companies couldn’t,” said Robert Petersen, Pilot Plant Manager at Cambridge Major.

Cambridge Major has utilized Solutia’s Therminol D-12 heat transfer fluid for nearly 10 years. “We’ve been very pleased with the performance of Therminol

D-12 and Solutia’s Total Lifecycle Care Program,” said Petersen. “Solutia’s technical support team goes above and beyond the call of duty.” The Total Lifecycle Care Program includes system-design support, start-up

assistance, training, sample analysis, flush and refill fluids and a fluid trade-in program.

Precise temperature control when operating at extremely low temperatures is essential for ensuring



the high degree of product quality necessary in the pharmaceutical industry. Solutia surveyed users of heat transfer fluids to understand considerations such as this when developing Therminol VLT. The end result is a product uniquely developed to meet the needs of the pharmaceutical industry. Performance features include:

- **Very Low Temperature Operation**

Therminol VLT has unmatched heat transfer performance to -115 °C and offers the benefits of liquid coolant temperature control.

“Solutia offers us one-stop shopping for our heat transfer fluid needs,”

-- Robert Petersen, Pilot Plant Manager
Cambridge Major Laboratories

than-ever temperatures. Cambridge Major Laboratories, a service-based chemistry outsourcing partner to the world’s leading pharmaceutical and biotechnology companies, was one such company seeking a low-temperature solution.



Cambridge Major's new state-of-the-art facility in Germantown, Wisc. For more information, visit <http://www.c-mlabs.com>

- **Cooling and/or Heating Operation**

Therminol VLT allows a single fluid to be used in many general purpose processes where both cooling and heating are required. The properties of Therminol VLT allow the same equipment to be used over its wide range of operation.

- **Easy Operation**

Using Therminol VLT avoids problems of using multiple fluids in the same piece of equipment and allows low-temperature operation with normal centrifugal pumps.

Further, because of its low-temperature capabilities, Therminol VLT can give users the added benefits of increased product yield and reduced production time.

Therminol's family of heat transfer fluids is utilized by many leading pharmaceutical companies and can meet the operating needs of virtually any single or multiple heat-using system.

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