



# **BERGQUIST HI FLOW THF 5000UT**

April 2024

#### PRODUCT DESCRIPTION

BERGQUIST HI FLOW THF 5000UT is tacky, high performance, unreinforced phase change TIM that provides the following product characteristics:

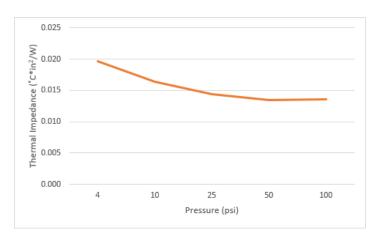
Technology	Phase change material
Appearance	Gray
Product benefits	Low thermal impedance and/or thermal resistance Excellent thermal performance for low pressure application Excellent reliability Easy for handling and rework
Phase change temperature, °C	45
Operating temperature, °C	-40 to 150
Application	Switches, Routers, Servers, Computers, Automotives
Flammability rating	UL94-V0

BERGQUIST HI FLOW THF 5000UT is a reworkable phase change thermal interface material suitable for use between a heat sink and variety heat generating components. The material flows at the phase change temperature, conforming to the surface features of the components. Upon flow, air is expelled from the interface, reducing thermal impedance, performing as a highly efficient thermal transfer material.

## **TYPICAL MATERIAL PROPERTIES**

## **Physical Properties**

Thermal impedance ASTM D5470, °C*in²/W	
@ 10 psi, 70°C	0.016
Thermal conductivity, W/m*K	
Multiple thickness, ASTM D5470	5.3
Modified ASTM D5470 for thin bondline materials	8.5
Melting point, °C	
Oscillatory parallel plate rheometer	45
Thickness range, mil	8, 10 & 12



### **GENERAL INFORMATION**

Please consult the Safety Data Sheet (SDS) for safe handling information of this product.

## Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on the specifications of this product.

### Storage:

Store product in an unopened container in a dry location. Storage information may be indicated on the product container labeling.

# Optimal Storage: 22°C. Storage greater than 35°C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel cannot assume responsibility for product which has beencontaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

### Conversions

 $(^{\circ}C \times 1.8) + 32 = ^{\circ}F$  kV/mm x 25.4 = V/mil mm / 25.4 = inches  $\mu$ m / 25.4 = mil N x 0.225 = lb N/mm x 5.71 = lb/in N/mm² x 145 = psi MPa x 145 = psi N·m x 8.851 = lb·in N·m x 0.738 = lb·ft N·mm x 0.142 = oz·in mPa·s = cP



#### Disclaimer

The information provided in this Technical data sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. Any liability in respect of the information in the Technical data sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

# In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

# In case products are delivered by Henkel Corporation, or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use there of. In light of the fore going, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequentialor incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

#### Trademark usage

Trademark usage Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 4

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Bergquist Company:

THF5000UT-0.008-02-11/75 THF5000UT-0.010-02-11/75 THF5000UT-0.012-02-11/75