ABLESTIK 281 provides the following product characteristics:

**Technology**  | Epoxy  
**Appearance** | Black thixotropic paste  
**Cure** | Heat cure  
**Product Benefits**
- One component
- Thixotropic
- Solvent-free
- Good chemical resistance
- Low coefficient of thermal expansion
- High thermal conductivity
- High electrical insulation

**Application**  | Assembly  
**Operating Temperature** | -60 to +205 °C  
**Key Substrates** | Metals, Glass and Plastics

ABLESTIK 281 epoxy adhesive is formulated for use in applications requiring excellent thermal conductivity.

**TYPICAL PROPERTIES OF UNCURED MATERIAL**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density, g/cm³</td>
<td>2.3</td>
</tr>
<tr>
<td>Shelf Life @ 25°C (from date of manufacture), days</td>
<td>90</td>
</tr>
<tr>
<td>Flash Point - See SDS</td>
<td></td>
</tr>
</tbody>
</table>

**TYPICAL CURING PERFORMANCE**

**Gel Time**
- 10 minutes @ 120°C  
- 2 minutes @ 150°C  
- 30 seconds @ 180°C

**Cure Schedule**
- 4 hours @ 80°C or  
- 1 hour @ 120°C or  
- 30 minutes @ 150°C or  
- 15 minutes @ 180°C

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

**TYPICAL PROPERTIES OF CURED MATERIAL**

**Physical Properties**
- Coefficient of Linear Thermal Expansion, ppm/°C | 32  
- Thermal Conductivity, W/(m-K) | 1.2  
- Water Absorption, 24-hr boil, % | 0.06

**Electrical Properties**
- Volume Resistivity, ohm-cm | $1 \times 10^{15}$

**TYPICAL PERFORMANCE OF CURED MATERIAL**

**Shear Strength**
- @ 25°C, N/mm² | 14.5 (psi) (2,103)  
- @ 120°C, N/mm² | 8 (psi) (1,160)

**GENERAL INFORMATION**

For safe handling information on this product, consult the Safety Data Sheet (SDS).

**DIRECTIONS FOR USE**

1. Roughen mating surfaces with emery cloth or other suitable abrading material to remove oxidation, scale, paint or other foreign matter and degrease with solvent such as Toluene or Trichlorethylene.
2. Apply ABLESTIK 281.

**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 specifications for this product.

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

**Optimal Storage : 25 °C**

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

**Conversions**

- °C x 1.8 + 32 = °F  
- kV/mm x 25.4 = V/mil  
- mm / 25.4 = inches  
- N x 0.225 = lb  
- N/mm x 5.71 = lb/in  
- psi x 145 = N/mm²  
- MPa = N/mm²  
- N·m x 8.851 = lb·in  
- N·m x 0.738 = lb·ft  
- N·mm x 0.142 = oz·in  
- mPa·s = cP

**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.

**Disclaimer**

Note:

The information provided in this Technical Data Sheet (TDS) including
In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada, Inc. 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 thereof. In light of the foregoing, 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 consequential or 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
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.