

# LOCTITE<sup>®</sup> 7229<sup>™</sup>

Nordbak High Temperature Pneu-Wear  
(Draft Kelleher) December 2016

## PRODUCT DESCRIPTION

LOCTITE<sup>®</sup> 7229<sup>™</sup> provides the following product characteristics:

<b>Technology</b>	Epoxy
Chemical Type	Epoxy
Appearance (uncured)	Thixotropic gray paste
Components	Two components - requires mixing
<b>Cure</b>	Room temperature cure
<b>Application</b>	Abrasion resistance
Specific Application	<ul style="list-style-type: none"> <li>• Providing protective lining in pneumatic conveying systems</li> <li>• Repairing and providing abrasion resistance in elbows, exhausters, hoppers, cyclones and dust collectors</li> </ul>
Specific Benefits	<ul style="list-style-type: none"> <li>• Small ceramic bead filled - resists fine particle abrasion</li> <li>• Prolongs equipment life</li> <li>• Easy to mix and use</li> <li>• Renews worn surfaces fast - reduces downtime</li> <li>• Non sag - provides abrasion resistance on over-head and vertical surfaces</li> </ul>
Mix Ratio, (by volume) Resin : Hardener	4 : 1
Mix Ratio, by weight - Resin : Hardener	4 : 1

LOCTITE<sup>®</sup> 7229<sup>™</sup> is a small ceramic bead filled two-part epoxy putty, designed to protect equipment from fine particle abrasion in wet and dry service. LOCTITE<sup>®</sup> 7229<sup>™</sup> requires post-curing for ultimate performance and temperature resistance.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Coverage 0.74 m<sup>2</sup> @ 6 mm thick/10 kg

## TYPICAL CURING PERFORMANCE

### Curing Properties

Working Time @ 25 °C, minutes 30

## TYPICAL PROPERTIES OF CURED MATERIAL

Cured @ 25 °C

### Physical Properties:

Compressive Strength, ISO 604 N/mm<sup>2</sup> 103.4  
(psi) (15,000)

Shore Hardness, ISO 868, Durometer D 85

## TYPICAL PERFORMANCE OF CURED MATERIAL

### Adhesive Properties

Cured @ 25 °C

Lap Shear Strength :

Aluminum (acid etched):  
0.125 mm gap

N/mm<sup>2</sup> 34.5  
(psi) (5,000)

## GENERAL INFORMATION

**This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.**

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

### Directions for use

#### Surface Preparation

Proper surface preparation is critical to the long-term performance of this product. The exact requirements vary with the severity of the application, expected service life, and initial substrate conditions.

1. Thoroughly clean and abrade surfaces (grit blast if possible), finally clean with LOCTITE<sup>®</sup> 7063<sup>™</sup>. The more thorough the degree of surface preparation the better the performance of the application.
2. On vertical or overhead areas, it is recommended to tack expanded metal mesh to substrate before application of LOCTITE<sup>®</sup> 7229<sup>™</sup>.

### Mixing:

1. Measure 4 parts resin to 1 part hardener by volume or weight, transfer entire kit onto a clean and dry mixing surface and mix together until uniform in color.
2. If resin and hardener temperatures are 15 °C or below, preheat resin only to about 30 °C but not to exceed 40 °C .

### Application

1. Apply fully mixed material to the prepared surface .
2. Initially apply the material in a very thin layer to "wet" out the surface and avoid air entrapment.
3. Build up to desired thickness (minimum 6 mm), avoid air entrapment.
4. At 25 °C working time is 30 minutes. Functional cure time is 6 hours, post cure at 150 °C for 2 hours.

**Caution:** Use an approved, positive-pressure, supplied air respirator when welding or torch cutting near cured compound. **Do Not** use open flame on compound.

### Technical Tips for Working With Epoxies

Working time and cure depends on temperature and mass:

- The higher the temperature, the faster the cure.
- The larger the mass of material, the faster the cure.

To speed the cure of epoxies at low temperatures:

- Store epoxy at room temperature.
- Pre-heat repair surface until warm to the touch.



To slow the cure of epoxies at high temperatures:

- Mix epoxy in small masses to prevent rapid curing.
- Cool resin/hardener component(s).

### 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: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.**

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 Henkel representative.

### Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\mu\text{m} / 25.4 = \text{mil}$

$\text{N} \times 0.225 = \text{lb}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{N/mm}^2 \times 145 = \text{psi}$

$\text{MPa} \times 145 = \text{psi}$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$

$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$

$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$

$\text{mPa}\cdot\text{s} = \text{cP}$

### 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 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.

Reference 0.0

