

# LOCTITE® Nordbak® Wearing Compound™

July 2015

## PRODUCT DESCRIPTION

LOCTITE® Nordbak® Wearing Compound™ provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Chemical Type</b>	Epoxy
<b>Appearance (Resin)</b>	Grey <sup>LMS</sup>
<b>Appearance (Hardener)</b>	Dark gray <sup>LMS</sup>
<b>Components</b>	Two component - requires mixing
<b>Mix Ratio, by volume - Resin : Hardener</b>	2 : 1
<b>Mix Ratio, by weight - Resin : Hardener</b>	2 : 1
<b>Cure</b>	Room temperature cure
<b>Application</b>	Abrasion resistance
<b>Specific Application</b>	<ul style="list-style-type: none"> <li>• Cyclone and separator bodies</li> <li>• Dust collectors and exhausters</li> <li>• Pump liners and impellers</li> <li>• Fan blades and housings</li> <li>• Chutes and hoppers</li> <li>• Elbows and transition points</li> </ul>
<b>Specific Benefit</b>	<ul style="list-style-type: none"> <li>• Ceramic - filled for outstanding resistance to abrasion</li> <li>• Renews worn surfaces fast - reduces downtime</li> <li>• Extends wear life - resists sliding abrasive wear and eliminates costly wear part inventory</li> <li>• Non sag - provides abrasion resistance on over-head and vertical surfaces</li> </ul>

LOCTITE® Nordbak® Wearing Compound™ is a ceramic bead filled two-part epoxy putty, designed to protect equipment from coarse particle abrasion in wet and dry service. Typical applications include supplying a protective lining in conveyor or slurry transport systems and providing abrasion resistance in elbows, transition points, slurry pumps, chutes, hoppers, crushers and breakers under service temperatures of -30 to 120°C (-20 to 250F).

## TYPICAL PROPERTIES OF UNCURED MATERIAL

### Resin:

Weight Per Gallon, lbs/gal 17.9 to 18.8<sup>LMS</sup>

### Hardener:

Weight Per Gallon, lbs/gal 18.7 to 18.8<sup>LMS</sup>

### Mixed:

Gel Time @ 70 °C, minutes 13 to 24<sup>LMS</sup>

Coverage 0.8 m² @ 0.63 cm thick/25 lb

Flash Point - See SDS

## TYPICAL CURING PERFORMANCE

### Curing Properties

Working Time @ 25 °C, minutes 30

Cure Time @ 25 °C, hours 7

## TYPICAL PROPERTIES OF CURED MATERIAL

Cured @ 25 °C

### Physical Properties:

Compressive Strength, ISO 604 N/mm² 110.3  
(psi) (16,000)

Shore Hardness, ISO 868, Durometer D 90

## 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® Cleaner. 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® Nordbak® Wearing Compound™.

**Mixing:**

1. Measure 2 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 32 °C but not to exceed 38 °C.

**Application Method:**

1. Apply fully mixed material to the prepared surface.
2. Initially apply as a thin film to "wet" out the surface.
3. Build up to desired thickness (minimum 6 mm), avoid air entrapment.
4. At 25 °C working time is 30 minutes and functional cure time is 7 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).

**Loctite Material Specification<sup>LMS</sup>**

LMS dated July 03, 2001 (Resin) and LMS dated July 03, 2001 (Hardener). Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Loctite Quality.

**Conversions**

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$   
 $\text{kV/mm} \times 25.4 = \text{V/mil}$   
 $\text{mm} / 25.4 = \text{inches}$   
 $\mu\text{m} / 25.4 = \text{mil}$   
 $\text{N} \times 0.225 = \text{lb}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{N/mm}^2 \times 145 = \text{psi}$   
 $\text{MPa} \times 145 = \text{psi}$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$

**Storage**

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

**Note**

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Reference 0.1