LOCTITE

1001 Trout Brook Crossing
Rocky Hill, CT 06067-3910
Telephone: (860) 571-5100
FAX: (860) 571-5465

Product Description Sheet
Nordbak® High Temperature Wearing Compound

Maintenance, Repair & Operations, May 1999

PRODUCT DESCRIPTION

LOCTITE® Nordbak® High Temperature Wearing compound is designed to rebuild, repair, and protect equipment exposed to extreme sliding abrasion under typical dry service temperatures of –29° to +232°C (–20° to +450°F). High Temperature Wearing Compound protects equipment in high heat environments where conventional repair systems fail. High Temperature Wearing Compound is recommended for protecting scrubbers, cyclones, dust collectors, and fan housings. Two-component epoxy requires post-curing for proper performance and temperature resistance.

Advantages:

- Cures to ceramic hardness – resists sliding abrasive wear
- Renews worn surfaces fast – reduces downtime
- Extends wear life – resists sliding abrasive wear and eliminates costly war part inventory
- Won't sag or shrink – conforms to over-head and irregular surfaces, application versatility

TYPICAL APPLICATIONS

- Cyclones and pulverizing mills
- Elbows
- Fan blades and housing
- Scrubbers
- Exhausters
- Chutes and hoppers

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. On all vertical or overhead applications, tack welding expanded metal mesh onto the metal substrate is strongly recommended prior to application of High Temperature Wearing Compound.
2. Clean, dry and abrade application surface. The more thorough the degree of surface preparation the better the performance of the application. If possible, it is recommended that the surface be grit blasted to a Near white Metal (SSPC-SP10/NACE No. 2) Standard. For less severe applications roughening the surface with hand tools is suitable.
3. Solvent cleaning with a residue-free solvent is recommended as the final step to aid in adhesion.

Mixing:

- Measure 4 parts resin to 1 part hardener by volume or transfer entire kit onto a clean and dry mixing surface and mix together until uniform in color. (If resin and hardener temperatures are 15°C (60°F) or below, preheat resin only to about 32°C (90°F) but not to exceed 38°C (100°F)

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. Apply the material to a minimum thickness of 0.64 cm (¼").
4. At 25°C (77°F), the working time in 30 minutes. Working and cure time depend on temperature and mass; the higher the temperature, the larger the mass, the faster the cure.
5. Post cure at 148°C (300°F) for 2 hours.

- **Caution!** Use approved, positive-pressure, supplied-air respirator when welding or torch cutting near cured compound. Use approved self-contained breathing apparatus when burning, welding, or torch cutting indoors near cured compound. Use approved respirator for dusts and mists when grinding or machining cured compound. DO NOT use open flame on compound. See other cautions on material Safety Data Sheet.

TECHNICAL TIPS FOR WORKING WITH EPOXIES

Working time and cure time depends on temperature and mass:

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

- Mix epoxy in small masses to proven rapid curing.

Cool resin/hardener component(s).

PROPERTIES OF UNCURED MATERIAL

Mixture	Typical Value
Appearance	Grey Paste
Mix Ratio (R:H) by Volume	4:1
by Weight	3.9:1
Coverage	0.8m^2 @ .63 cm thick per 25 lb. 8.7 ft^2 @ ¼ " thick per 25 lb.

TYPICAL CURING PERFORMANCE

(@ 25°C unless noted)

Curing Properties	Typical Value
Working Life, minutes	30
Cure Time, hours	Requires Post Cure, See Directions For Use

TYPICAL PROPERTIES OF CURED MATERIAL

(@ 25°C unless noted)

Physical Properties	Typical Value
Compressive Strength, ASTM D695, psi (N/mm^2)	15,000 (103.4)
Hardness ASTM D-2240, Shore 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 Material Safety Data Sheet, (MSDS).

Ordering Information

Part Number	Container Size
99112	25 lb. kit

Storage

Product shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8°C to 28°C (46°F to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container. For further specific shelf life information, contact your local Technical Service Center.

Data Ranges

The data contained herein may be reported as a typical value and/or range. Values are based on actual test data and are verified on a periodic basis.

Note

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, **Loctite Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Loctite Corporation's products. Loctite 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 Loctite 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.