Loctite ®PC 9020 Nordbak® Backing Compound

Maintenance, Repair & Operations, Oct. 2012

PRODUCT DESCRIPTION

PC 9020 Nordbak® Backing Compound is an epoxy system for backing wear metal in gyratory and cone crushers under typical dry service temperatures of -28°C to 104°C (-20°F to 220°F).

Advantages:

- The product needs no melting or special equipment, and has high hydrolytic stability (low water absorption), high volumetric stability that eliminates formation of gaps between backing and liners or support structures. It is easy and safe to use.
- Low odor formula.
- High Compression Strength
- High Impact Resistance
- Color-changing technology assures product is fully mixed
- Low shrinkage
- Convenient kit size and durable metal cans
- Global avaibility

DIRECTIONS FOR USE

Preparation of metallic parts:

- All metallic parts that come in contact with PC 9020 Nordbak® Backing Compound should be free of rust, dirt, grease, and oil. Seal hook holes and bottom joints, and protect threaded parts of shafts where necessary. To facilitate easier removal of worn liners, coat crusher heads and mill shells with grease.

Preparation of backing material:

- PC 9020 Nordbak® Backing Compound must be at 15-26°C (60-80°F) before use. Lower temperatures give longer working life, but higher viscosity (harder to pour), while higher temperatures reduces working time to pour into crusher.

Mixing Instructions:

1. Premix resin approximately one minute.
2. Shake hardener thoroughly mixing its contents.
3. While mixing resin add hardener contents.
4. Mix both components together for approximately 5 minutes, until a uniform color is reached.
5. Pour mixture immediately after mixing. Pour in one place and allow PC 9020 Nordbak® Backing Compound to fill the cavity and push out the air in front of it. Use dam (tin, cardboard, clay, etc.) to direct the flow when necessary. Unmixed resin (different color clinging to the sides and bottom) should not be drained into the crusher.
6. Succeeding kits may be mixed and poured individually as needed. PC 9020 Nordbak® Backing Compound adheres to itself.

Caution! Use approved, positive-pressure, supplied-air respirator when welding or torch cutting near 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 temperatures:

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

PROPERTIES OF UNCURED MATERIAL

Feature	Typical Value
Appearance (un mixed)	Greenish/Gray Resin: Amber Hardener
Appearance (mixed)	Blue
Mix Ratio (R:H) by Weight	100: 4.68
Coverage	~ 340 in^3 per 2 gallon kit 5,576 cm^3

TYPICAL PERFORMANCE

Property	Typical Value
Compressive Strength, psi (N/mm^2) 24 hrs ASTM D695-02	19,000
Hardness Shore D STM-707	83
Shrinkage STM-753 (% linear)	1.24
(% Volume)	3.69
Working Time @ 77°F (minutes)	20
Functional Cure At 77°F (hours)	8

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).

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

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