HIGH IMPACT PULLEY

Technical Data Sheet
February 2023

12.5 kg PART NUMBER 7459-9959P

Tested against and complies with Naval Engineering Standard 713 for Smoke Toxicity
Tested against and complies with ISO 340 for Flammability
Suitable for underground applications
Meets the requirements of SANS 1669-2

TECHNICAL DATA

Components	Two Parts – Resin & Hardener
Appearance (Resin)	Pale Grey
Appearance (Hardener)	Red with white beads
Kit sizes	12.5kg

DESCRIPTION:

NORDBAK® High Impact Pulley was designed primarily for relining pulleys. NORDBAK® High Impact Pulley will bond to all types of metal with proper surface cleaning.

NORDBAK® High Impact Pulley can also be used wherever high wear and high impact conditions have been wearing away production profits.

NORDBAK® HIGH IMPACT PULLEY: WHERE TO USE IT:

Conveyor Skirts	Slurry Lines
Feed Chutes	Pipe Elbows
Wear Plates	Pulley Lagging

NORDBAK® High Impact Pulley contains round alumina beads and is easy to mix and apply to any surface. It is trowelable and can even be hand smoothed with a rubber glove. It conforms to any shape, including curved surfaces such as cones and elbows. Use of this advanced material cuts downtime to a minimum. At normal room temperature, curing is complete in 3 to 4 hours - far less if heat is applied.

PHYSICAL PROPERTIES

Smoke toxicity index	2
Impact (falling ball)	4.8 Nm
Compressive Strength Test Method ASTM D-695-54	128 MPa
Heat deflection temperature Test Method ASTM D648	75 °C
Lap Shear Strength Test Method ASTM D-1002-53T	34 MPa
Gel Time @ 20°C Test Method SPI-ERF 13-70	45 Minutes
Working Time	35 Minutes at 25°C

APPLICATION INSTRUCTIONS:

Clean oil, rust, dust and water from surface. Sandblast to SA 2½. Prepare only the amount of **NORDBAK® High Impact Pulley** required, mixing resin and hardener in 2 to 1 ratio either by mass or volume. Unused portion may be resealed in cans for future use. Apply a small amount of mix to pre-heated surface and rub in to ensure proper adhesion. Then apply remaining compound. Working life is 30-45 minutes. Compound will cure ready for use in 3-4 hours at 20°C.

Ideal for armour surfacing high wear areas, especially where solids and slurries cause abrasion. Contains sapphire hard spherical alumina ceramic beads in co-polymer resin. The beads take the wear and prolong life of the base material.

RELATIVE WEAR RESISTANCE OF NORDBAK® HIGH IMPACT PULLEY VS OTHER WEAR MATERIALS (SLIDING FINE GRAIN ABRASION)

Diamond	10.00
Boron Nitride	8.00
Ceramic Al_2O_3	6.00
NORDBAK® HIGH IMPACT PULLEY COMPOUND	**4.80**
Tungsten Carbide	4.50
Silicon Carbide (Cemented)	3.00
Urethane	2.50
Gum Rubber	1.00
Neoprene	.75
Ni-hard Cast	.60
T[1] Steel Plate	.50
C Steel Plate	.30
Aluminium	.10

APPROXIMATE COVERAGE

Kit contains approx. 6 litres. Will cover 1m² x 6mm thick.

TECHNICAL TIPS FOR WORKING WITH HI IMPACT PULLEY:

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 up the curing time at low temperatures:

- The lower the temperature, the longer the cure.
- In cold weather, store kits in a warm area and warm the resin between 15 -25°C before mixing.
- Pre-heat surface until warm to the touch.

Pour all hardener into the resin and mix thoroughly until a uniform colour is achieved.

DO NOT MIX RESIN AND HARDENER UNTIL READY TO COMMENCE.

NORDBAK® has a wide variety of resin systems now available. **Crusher:** NORDBAK® Fast-set and Deep Pour Grouts, NORDBAK® Trowel mix, NORDBAK® Primary, High Performance and Standard **Backing Compounds:** Wearing compounds include NORDBAK® **High Temperature Wearing Compound**: NORDBAK® High Temperature Pneu Wear, NORDBAK® Regular Wearing Compound, NORDBAK® Nordwear 5, Nordwear 8 and Nordtile wearing compounds and the Nordcoat Acid resistant coating range.

193 Immelman road, Wadeville, Germiston - P.O Box 14794, Wadeville, 1422 - Tel: +27 11 824 1640 - Web: www.nordbak.co.za

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Important note when applying NORDBAK® High Impact Pulley onto the surfaces of pulleys.

- We would advise that the pulley is checked for excessive wear prior to lining and that the application meets SANS 1669-1 and SANS 1669-2.
- The pulley is cleaned back to steel by an acceptable method (not by burning). The pulley should be inspected for damage and the shell thickness wear.

  Maximum wear permissible

14mm shell	4mm wear max
18mm shell	5mm wear max
22mm shell	6mm wear max
25mm shell	7mm wear max

- The surface of the pulley must be shot blasted to SA 2½.
- Centre Crowning will be 1:100 whilst Edge Crowning must be specified by the user but is normally tapered 1:50 on the outer 1/6 of the pulley.
- Non drive pulleys will normally be lagged at 6mm on the edge.

PROTECTION:

- All work is to be done in a well-ventilated area.
- Overalls and eye protection required.
- Refer to Material Safety Data Sheet.

STORAGE:

Store indoors on pallets at temperatures between 10°C and 35°C. Keep container tightly closed and away from acids and oxidizers. If product is removed from container do not return it to original container as contamination may have occurred.

DISCLAIMER:

The information provided in this data sheet including the recommendations for use and application of this product are based on our knowledge and practical experience and laboratory tests of the product as at the date hereof. This data sheet shall be used as a guide to the user's application.

This product has been designed for specific applications based on normal working and operating conditions, and although it may be used in different applications and working conditions such instances are beyond our control. Therefore Nordbak shall not be liable for the suitability/merchantability of our product in your application unless we have specifically advised so in writing. Accordingly, we advise that you conduct your own investigations to confirm the suitability of our product, as it ultimately remains the user's responsibility to protect property and persons against hazards emanating from the handling and use thereof. Accordingly, any civil liability as a result of damages, injury, or death, in respect of the information in this data sheet, or any other written or oral recommendation(s) regarding the suitability of this product, are hereby excluded. Furthermore Nordbak shall not be liable under any circumstances for any consequential or incidental damages of any kind, including but not limited to loss of profits.

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