

STEEL TROWEL MIX

Technical Data Sheet February 2023

4x1kg PART NUMBER 9505-9936 12kg PART NUMBER 9505-9935

EASY TO USE. JUST TROWEL IT ON. DRILL, TAP MACHINE JUST LIKE STEEL. RESISTS CORROSION.

TECHNICAL DATA

Components	Two Parts – Resin & Hardener
Appearance (Resin)	Black
Appearance (Hardener)	Blue
Kit sizes	4 x 1kg
	12kg

DESCRIPTION:

NORDBAK® Steel Trowel Mix is a 100% solids epoxy resin system filled with steel powder. Once hardened, it can be machined, drilled, tapped, or filed just like steel. It does not sag, and applies readily to horizontal, vertical, or overhead surfaces. It is an excellent material for fast, low-cost repairs to steel, iron, or other ferrous castings.

Worn pulleys can be rebuilt in one-fourth of the time required for hardface welding. Worn or corroded surfaces built up with **Steel Trowel Mix** can be machined easily back to their original shape. Other applications include repair of broken metal parts, surface coating to protect against abrasion and as a tooling jig fixture or modelling material. It also bonds securely to iron, steel, ceramic, carbide, concrete, wood and many other materials. It resists abrasion and chemical corrosion, cures without heat or special devices, and is non-shrinking.

PHYSICAL PROPERTIES

Tensile lap shear ASTM D – 1002	18 MPa
Tensile strength ASTM D – 639	42 MPa
Compressive strength ASTM D – 695	100 MPa
Specific gravity of cured material	3.0
Heat deflection temperature ASTM D -	90°C
648	
Impact strength, IZOD ASTM D 256	3,4kg m
Working life at 21°C	30 min
Hardening time at 21°C	120 min
Mixing ratio	8:1 (vol.)
Shelf life of unopened or resealed kit	12 Months

HOW TO USE IT

- Clean oil, rust, dust and water from surface.
- Grind or sandblast if needed, but leave surface rough, not polished.
- Pre-heat surface to about 40°C immediately before application in order to remove water.
- Prepare only the amount of NORDBAK® Steel Trowel Mix required, mixing resin and hardener in 8 to 1 ratio by volume.

- Unused portions may be resealed in cans and stored up to one year for future use.
- Apply small amounts of mix to pre-heated surface and rub in to ensure proper adhesion.
- Then apply the remaining compound.
- Working life is 30 45 minutes, ample for large or hard to reach surfaces.
- Compound will cure ready for use in 6-8 hours at 20°C
- For best results, post- cure after compound has hardened, by re-heating surfaces to about 65°C for 10 minutes. This will ensure proper cure and bonding.

TECHNICAL TIPS FOR WORKING WITH STEEL TROWEL MIX: 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.
- Pre-heat surface until warm to the touch.

DO NOT MIX RESIN AND HARDENER UNTIL READY TO COMMENCE.

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

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.



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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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