

LOCTITE®

Nordbak® Wearing Compounds

Protecting Against

- Abrasion
- Corrosion
- Wear

Anti-Seize

Cleaners

Epoxies

Flooring

Hand Cleaners

Nordbak®
Wearing Compounds

Urethanes



Nordbak Epoxies

Nordbak® Wearing Compounds utilize the superior wear properties of ceramic and the convenience of two-part epoxies to protect equipment like pumps, chutes, and augers in harsh industrial environments. Available in trowelable and brushable formulations with special fillers for tough conditions, Nordbak products stand up to every corrosion, abrasion, and wear problem you can encounter, and are ideal for all those large-scale repairs that have to last.

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)

STANDARD FORMULAS

WEARING COMPOUND

A two-component epoxy designed to protect, rebuild, and repair high wear areas of processing equipment. Wearing Compound is ceramic-filled for outstanding resistance. It protects against hard sliding abrasion and corrosion up to 250°F. It is non-sagging and trowelable, providing protection on overhead and irregular surfaces.

Typical Applications:

- pump housings
- material handling equipment
- transport elbows and transitions
- cyclone and separator bodies
- dust collectors and exhausters
- pump liners and impellers
- fan blades and housings
- chute linings and hoppers



PNEU-WEAR

This epoxy contains small ceramic beads and silicon carbide for maximum protection against pneumatic/fine particle abrasion up to 250°F. Pneu-Wear won't sag or shrink, providing abrasion resistance on overhead and vertical surfaces.

Typical Applications:

- providing protective lining in pneumatic conveying systems
- Repairing and providing abrasion resistance in:
 - elbows
 - slurry pumps
 - cyclones
 - dust collectors
 - hoppers



BRUSHABLE CERAMIC

An ultra-smooth, ceramic reinforced epoxy that provides a high gloss, low friction coating to protect against turbulence, abrasion, and cavitation up to 200°F. Used by itself, Brushable Ceramic is recommended for sealing and protecting equipment from corrosion and wear. It also works as a topcoat over Nordbak® Wearing Compound or Pneu-Wear for applications requiring surface rebuilding and lasting protection. Available in grey and white.

Typical Applications:

- providing a smooth, protective, abrasion resistant coating
- lining tanks and chutes
- resurfacing and repairing rudders and pintel housings
- Repairing:
 - heat exchangers
 - condensers
 - cooling pump impellers
 - butterfly valves
 - cavitated pumps



SPECIAL FORMULATIONS

HIGH IMPACT WEARING COMPOUND

A rubber-modified, two-component epoxy that offers the wear resistance properties of an epoxy along with impact resistance not usually found in epoxy formulations. With impact resistance superior to ceramic tile, this product is for applications where both sliding abrasion and impact are present, at temperatures up to 250°F.

Typical Applications:

- dredge pump liners
- flumes and troughs
- vibrating feeder
- pump impellers
- chutes
- hoppers

COMBO BEAD WEARING COMPOUND

This trowelable epoxy system combines the abrasion resistant qualities of both large and small ceramic beads and silicon carbide. It protects against hard sliding abrasion and extends the life of material handling equipment, at temperatures up to 250°F.

Typical Applications:

- transport elbows and transitions
- pump liners and impellers
- large pump suction areas
- fan blades and housings
- chute linings and hoppers
- cyclone and separator bodies



CASTABLE WEARING COMPOUND

A unique 3-part epoxy that can be cast into a mold or formed into any shape to make ceramic-like replacement parts. Use it for making replacement parts, lining cyclone apexes, and filling flat back elbows. Ceramic fillers give the finished parts excellent resistance to wear and abrasion up to 250°F.

Typical Applications:

- cyclone apex cones
- pipe transitions
- cast in place wear plates
- pour flatback elbows

CHEMICAL RESISTANT COATING

This advanced formulation epoxy is designed to protect equipment against extreme chemical attack and corrosion. It forms a smooth, glossy, low-friction finish that protects against turbulence and cavitation up to 150°F, and its low viscosity means it can be applied by brush.

Typical Applications:

- resurface tube sheets, condensers, cooling pump impellers, butterfly valves, and cavitated pumps
- resurface and repair rudders and pintel housings
- line tanks and chutes
- line chemical containment areas



CERAMIC TILE ADHESIVE

A high strength epoxy for securing ceramic tiles to vertical, horizontal, and overhead surfaces quickly at temperatures up to 200°F. Excellent shock and impact resistance makes it an ideal grout.

Typical Applications:

- bonding ceramic tiles
- patch holes in pressure systems
- secure vertical anchor bolt



FAST CURE & HIGH TEMPERATURE FORMULAS

ULTRA HIGH TEMPERATURE WEARING COMPOUND

This product is designed to protect equipment against extreme sliding abrasion in high heat environments at temperatures up to 550°F. Ultra High Temperature Wearing Compound must be post-cured* for maximum temperature resistance and performance.

FAST CURE PNEU-WEAR

Like standard Pneu-Wear, this fast-curing version is a two-component, small ceramic-bead filled repair material that protects against fine particle abrasion up to 225°F and cures in just 3 hours, less than half the time of conventional curing epoxies.



HIGH TEMPERATURE PNEU-WEAR

This product is designed to protect equipment against fine particle abrasion and temperatures up to 450°F. High Temperature Pneu-Wear must be post-cured* for maximum temperature resistance and performance.



FAST CURE WEARING COMPOUND

A faster version of Wearing Compound, this trowelable epoxy works in less than half the time of conventional curing epoxies to renew worn surfaces fast, reducing downtime. Puts equipment back in service in as little as three hours at temperatures up to 225°F.

HIGH TEMPERATURE WEARING COMPOUND

This product is designed to rebuild, repair, and protect equipment exposed to extreme sliding abrasion and temperatures up to 450°F. High Temperature Wearing Compound must be post-cured* for maximum temperature resistance and performance.



ULTRA HIGH TEMPERATURE PNEU-WEAR

Ultra High Temperature Pneu-Wear protects against fine particle abrasion in high heat environments at temperatures up to 550°F. This product must be post-cured* for maximum temperature resistance and performance.

HIGH TEMPERATURE BRUSHABLE CERAMIC

High Temperature Brushable Ceramic performs like standard Brushable Ceramic, while providing protection up to 550°F. It can be used by itself, or as a topcoat over high temperature formulations of Wearing Compound or Pneu-Wear.

This product must be post-cured* for maximum temperature resistance and performance.



* See Product Description Sheet for curing details.

NORDBAK® EPOXIES APPLICATION EXAMPLES

PROBLEM: Uneven tiled lining
EQUIPMENT: Inlet section of heavy media cyclone
SOLUTION: Nordbak® Brushable Ceramic



In this two-step process, Nordbak® Wearing Compound is used to rebuild the flat disk area of the cyclone intake. Nordbak® Brushable Ceramic is then applied to provide a low-friction finish to prevent turbulence created by irregularities in the tile profile.

PROBLEM: Worn bronze parts
EQUIPMENT: Propeller casting
SOLUTION: Nordbak® Pneu-Wear and Brushable Ceramic



Severe abrasion had worn out a critical part of a marine propeller. To rebuild the surface and provide maximum protection from salt water exposure, Nordbak® Pneu-Wear was applied. The area was then coated with Nordbak® Brushable Ceramic to provide a durable, low-friction finish.

PROBLEM: Eroded processing equipment
EQUIPMENT: Cyclone apex
SOLUTION: Nordbak® Wearing Compound



A form on the end of the apex is used to rebuild the interior to its original dimensions. Nordbak® Wearing Compound is applied here with a gloved hand to fill the eroded area and smooth the finish.

PROBLEM: Erosion of internal structure
EQUIPMENT: Side suction media pump
SOLUTION: Nordbak® Wearing Compound



A pump divider designed to reduce the turbulence inside the pump was almost completely worn away due to abrasion. It was rebuilt using a form over which Nordbak® Wearing Compound was applied until the repaired section replicated the original divider.

APPLICATION SELECTION GUIDE	Fine particle abrasion	Multiple particle abrasion	Impact resistance	Chemical corrosion protection	High temperature resistance	Fast cure	Corrosion protection	Tile installation	Pump repair	Elbows	Fan housings	Cyclones	Chutes
PRODUCT													
Wearing Compound									●	●	●	●	●
Fast Cure Wearing Compound						●			●	●	●	●	●
High Temperature Wearing Compound					●				●	●	●	●	●
Ultra High Temperature Wearing Compound					●				●	●	●	●	●
High Impact Wearing Compound			●										
Castable Wearing Compound										●		●	
Pneu-Wear	●	●							●	●	●	●	●
Fast Cure Pneu-Wear	●	●				●			●	●	●	●	●
High Temp. Pneu-Wear	●	●			●				●	●	●	●	●
Ultra High Temp. Pneu-Wear	●	●			●				●	●	●	●	●
Combo Bead Wearing	●	●								●	●	●	●
Brushable Ceramic				●			●		●				
High Temperature Brushable Ceramic				●	●		●		●				
Chemical Resistant Coating				●			●						
Ceramic Tile Adhesive			●					●					

● Preferred choice ● Good choice

NORDBAK® PRODUCT SELECTOR

NORDBAK® EPOXIES

PRODUCT	Product Number	Container	Coverage, ft. ² @ 1/4" thickness	Color	Maximum operating temperature, °F	Compressive strength, psi	Hardness (Shore D)	Working time, minutes, 77°F	Functional cure, hours, 77°F	Mix ratio by volume, r:h	Mix ratio by weight, r:h
Wearing Compound	99813	5 lb. kit	1.75	Grey	250	16,000	90	30	7	2:1	2:1
	99812	25 lb. kit	8.75								
Fast Cure Wearing Compound	96373	6 lb. kit	2.1	Blue	225	10,000	90	10	3	2:1	2:1
High Temperature Wearing Compound	99112	25 lb. kit	9	Grey	450	15,000	85	30	▲	4:1	3.9:1
Ultra High Temperature Wearing Compound	96392	25 lb. kit	9	Grey	550	–	90	30	▲	2.44:1	2.85:1
High Impact Wearing Compound	39918	25 lb. kit	8.75	Grey	250	15,000	85	30	6	2:1	2:1
Castable Wearing Compound	98992	25 lb. kit	277 in. ³	Grey	225	18,500	90	30	6	2:1	6.8:1
Pneu-Wear	98383	3 lb. kit	1.1	Grey	250	15,000	90	30	6	4:1	4:1
	98382	25 lb. kit	9								
Fast Cure Pneu-Wear	96363	6 lb. kit	2.1	Blue	225	12,000	90	10	3	2:1	2:1
High Temperature Pneu-Wear	98372	25 lb. kit	8.8	Grey	450	15,000	90	30	▲	4:1	4:1
Ultra High Temp. Pneu-Wear	96332	25 lb. kit	8.8	Grey	550	–	90	30	▲	2:1	2.27:1
Combo Bead Wearing	96303	6 lb. kit	2.3	Grey	250	13,000	90	25	8	2:1	2:1
Brushable Ceramic	98733	2 lb. kit	12*	Grey White	200	12,500	85	30	6	2.75:1	4.8:1
	98732	6 lb. kit	36*		200	12,500	85	30	6	2.75:1	4.8:1
	96443	2 lb. kit	12*		200	12,500	85	15	5	2.9:1	4.8:1
High Temperature Brushable Ceramic	96433	2 lb. kit	21.5*	Red	550	16,000	90	120	▲	2.6:1	4.25:1
Chemical Resistant Coating	96092	12 lb. kit	74*	Grey	150	10,000	83	20	16	2.2:1	3.7:1
Ceramic Tile Adhesive	97762	20 lb. kit	12	Beige	200	14,000	88	60	12	1:1	3.7:1

Properties based on mixing one lb. mass at 77°F, ultimate cure.

*20 mil thickness.

▲ Requires heat cure. See Product Data Sheet.

Available From:

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A  Company

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