

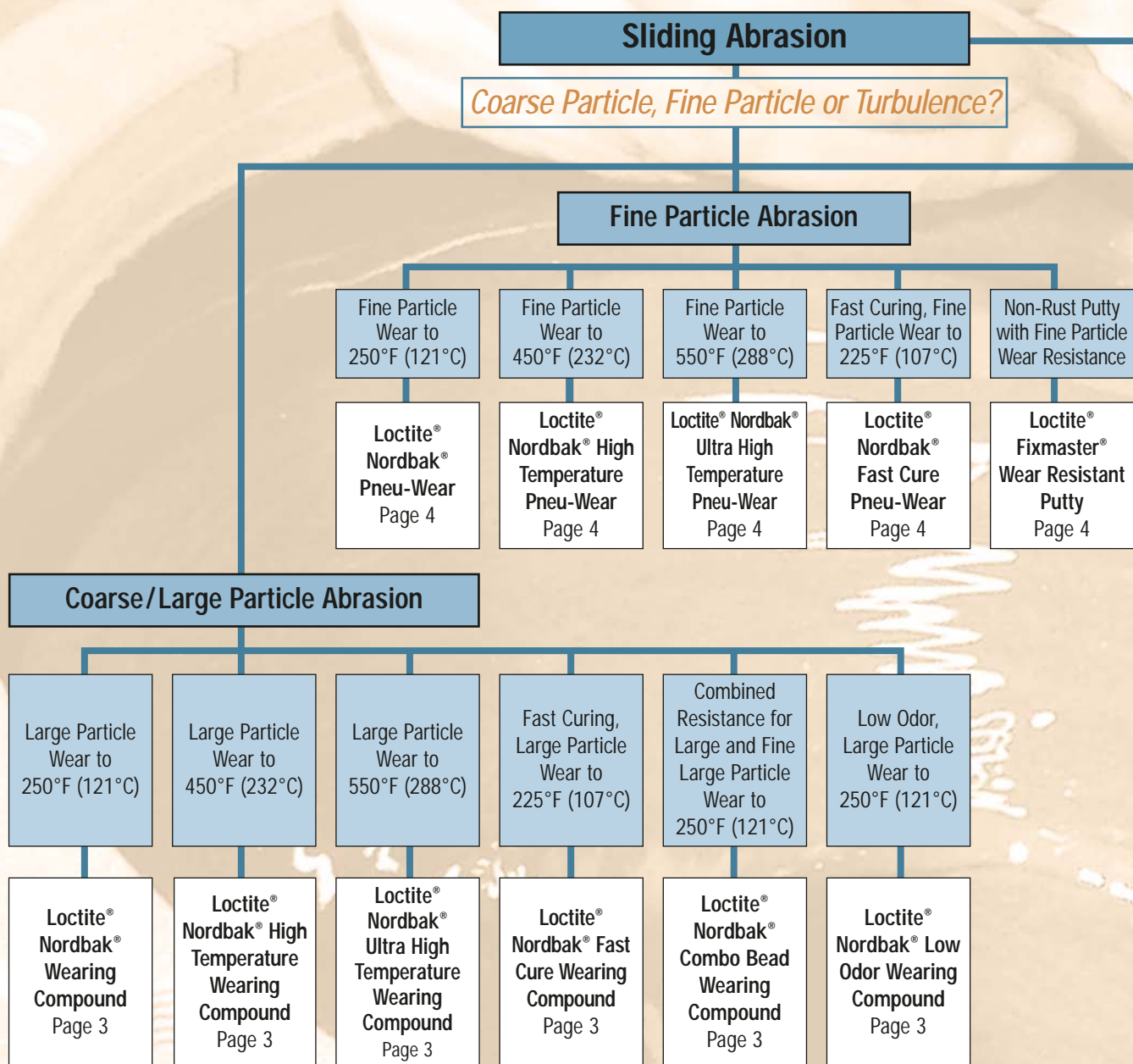
LOCTITE®

Loctite® Nordbak® Wear Resistant Coatings *Rebuild, Repair and Protect Industrial Equipment Brochure*



Loctite® Wear Resistant Coatings Selector Guide

Loctite® Nordbak® Wear Resistant Coatings 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, Loctite® Nordbak® products stand up to almost any corrosion, abrasion and wear problem you can encounter, and are ideal for all those large-scale repairs that have to last.



- ✓ Provide superior protection from environmental impact
- ✓ Eliminate and break corrosion/erosion cycle
- ✓ Non-shrink and non-sag formulations
- ✓ High compression strength
- ✓ Broad chemical resistance
- ✓ Broad range tailored to specific applications

Are you experiencing mechanical wear/abrasion or corrosion/erosion?

Wear/Abrasion

Extreme Corrosion/Erosion

Sliding Abrasion or Impact Resistance?

Loctite® Nordbak® Chemical Resistant Coating
Page 6

Liquid/Slurry Turbulence

Impact

Specialty

Low Friction,
Turbulence
Resistance to
200°F (93°C)

Low Friction,
Turbulence
Resistance to
550°F (288°C)

Thin Mil,
Low Friction,
Turbulence
Resistance to
200°F (93°C)

Loctite®
Nordbak®
High Impact
Wearing
Compound
Page 6

Loctite®
Fixmaster®
Flex 80™ Putty
Page 6

Loctite®
Nordbak®
Castable
Wearing
Compound
Page 6

Loctite®
Nordbak®
Ceramic Tile
Adhesive
Page 6

Loctite®
Nordbak®
Brushable
Ceramic
Page 5

Loctite®
Nordbak® High
Temperature
Brushable
Ceramic
Page 5

Loctite®
Nordbak®
Brushable
Ceramic –
Thin Mil
Page 5



Sliding Abrasion, Wear Resistance and Extreme Corrosion / Erosion

Nordbak® Wear Resistant Coatings for repair and protection against mechanical wear and sliding abrasion.

Protecting vital operating equipment with
Loctite® Nordbak® Wearing Compounds

COARSE / LARGE PARTICLE ABRASION

LOCTITE® NORDBAK® WEARING COMPOUND

Coarse Abrasion and Corrosion Resistance

A two-part epoxy designed to protect, rebuild and repair high wear areas of processing equipment under typical service temperatures up to +250°F (+121°C). Ceramic-filled for outstanding resistance to abrasion and corrosion. This compound is trowelable and non-sagging and therefore suitable for overhead and irregular surfaces. It is used to resist sliding abrasion when large particles are present ($\frac{1}{16}$ ").



5 lb. kit – 99813
25 lb. kit – 99812

LOCTITE® NORDBAK® FAST CURE WEARING COMPOUND

Coarse Abrasion and Corrosion Resistance while Curing Faster

This faster curing version performs like standard Loctite® Nordbak® Wearing Compound, while offering a working time of 10 minutes and reducing total equipment downtime to as little as three hours.



6 lb. kit – 96373

LOCTITE® NORDBAK® COMBO BEAD WEARING COMPOUND

Both Coarse and Fine Particle Abrasion and Corrosion Resistance

Loctite® Nordbak® Combo Bead Wearing Compound contains both large and small ceramic beads, offering better wear properties when both coarse/ large and fine particles are present.



6 lb. kit – 96303

LOCTITE® NORDBAK® HIGH AND ULTRA HIGH TEMPERATURE WEARING COMPOUNDS

Coarse Particle Abrasion and Corrosion Resistance at High Temperatures

These epoxy compounds perform like Loctite® Nordbak® Wearing Compound, while protecting equipment in high heat environments up to 450°F and 550°F (232°C and 288°C), where conventional repair systems fail.



High Temperature
25 lb. kit – 99112
Ultra High Temperature
25 lb. kit – 96392

LOCTITE® NORDBAK® LOW ODOR WEARING COMPOUND NEW

Coarse Abrasion and Corrosion Resistance with Low Odor

Loctite® Nordbak® Low Odor Wearing Compound offers the same protection against coarse/large particle abrasion as Loctite® Nordbak® Wearing Compound, while offering a low odor. This coating is particularly suited for applications in areas where ventilation may be limited.



25 lb. kit – 41343

Tips and Tricks

Loctite® Fixmaster® and Nordbak® Curing Times

Working time and cure 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 composites at low temperature:

- Store composite at room temperature
- Pre-heat repair surface until warm to touch

To **SLOW THE CURE** of composites at high temperature:

- Mix composites in small masses to prevent rapid curing
- Cool resin/hardener components

FINE PARTICLE ABRASION

LOCTITE® NORDBAK® PNEU-WEAR



3 lb. kit – 98383
25 lb. kit – 98382

Fine Particle Abrasion Resistance

A two-component epoxy, filled with small ceramic beads and silicon carbide, for protecting processing equipment from fine particle abrasion. This trowelable and non-sag epoxy is recommended for rebuilding, repairing and protecting high wear areas under typical dry service temperatures of up to 250°F (121°C). It won't sag or shrink, so it is also suitable for providing abrasion resistance on overhead and vertical surfaces. It is used to resist sliding abrasion when small particles are present (<math>< \frac{1}{16}''</math>).

LOCTITE® NORDBAK® FAST CURE PNEU-WEAR



6 lb. kit – 96363

Fine Particle Abrasion Resistance While Curing Faster

Loctite® Nordbak® Fast Cure Pneu-Wear performs like standard Loctite® Nordbak® Pneu-Wear, while offering a working time of 10 minutes and reducing total equipment downtime to as little as three hours.

LOCTITE® FIXMASTER® WEAR RESISTANT PUTTY



1 lb. kit – 98742
3 lb. kit – 98743

Resistance to Non-Sagging and Abrasion

Ceramic fibers give this trowelable, corrosion resistant putty excellent wear and abrasion resistance properties under typical service temperatures up to 225°F (107°C). It cures to a smooth, low friction finish for equipment exposed to wear, erosion, and cavitation.

LOCTITE® NORDBAK® HIGH AND ULTRA HIGH TEMPERATURE PNEU-WEAR



High Temperature
25 lb. kit – 98372
Ultra High Temperature
25 lb. kit – 96332

Fine Particle Abrasion Resistance at High Temperatures

High temperature versions of Loctite® Nordbak® Pneu-Wear designed for hot environments. These trowelable and non-sag, two-part epoxies resist fine particle abrasion under typical dry service temperatures up to 450°F (232°C) and 550°F (288°C).



Repairing a pump impeller with Loctite® Fixmaster® Wear Resistant Putty

Did You Know?

Wear Indicator

When applying two coats of Loctite® Nordbak® Brushable Ceramic, a different color can be used for each: grey and white. When the first coat begins to wear, the second color coat will show through, providing an accurate visual indicator of wear.



LIQUID / SLURRY TURBULENCE

LOCTITE® NORDBAK® BRUSHABLE CERAMIC



2 lb. kit (White) – 96443
2 lb. kit (Grey) – 98733
6 lb. kit (Grey) – 98732

Brushable Protective Coating against Liquid/Slurry Turbulence and Cavitation

An ultra-smooth, ceramic reinforced epoxy that provides a high gloss, low friction coating to protect against turbulence, abrasion and cavitation under typical dry service temperatures up to 200°F (93°C). Used by itself, it is recommended for sealing and protecting equipment from corrosion and wear. It also works as a topcoat over Loctite® Nordbak® Wearing Compound or Loctite® Nordbak® Pneu-Wear for applications requiring surface rebuilding and lasting protection. Alternative coat colors can be used to indicate wear.

LOCTITE® NORDBAK® BRUSHABLE CERAMIC – THIN MIL NEW



2 lb. kit (Grey) – 40592
2 lb. kit (Blue) – 40591
2 lb. kit (Black) – 40590

Thin Mil Brushable Ceramic Protective Coating against Liquid/Slurry Turbulence and Cavitation

Loctite® Nordbak® Brushable Ceramic – Thin Mil can be drawn to half the thickness of standard Loctite® Nordbak® Brushable Ceramic while also providing a high gloss, low friction coating to protect against turbulence, abrasion, and cavitation. This product is ideal for applications where tight tolerances are an issue. Similar to the standard version, the Thin Mil is available in three colors to allow for layering and use as a wear indicator.

LOCTITE® NORDBAK® HIGH TEMPERATURE BRUSHABLE CERAMIC



2 lb. kit – 96433

Brushable Protective Coating against Liquid/Slurry Turbulence and Cavitation at High Temperatures

A brushable two-part epoxy designed to protect against turbulence, abrasion and cavitation under extreme heat. Typical dry service temperatures up to 550°F (288°C).



Coating a pump volute with Loctite® Nordbak® Brushable Ceramic

IMPACT WEAR RESISTANCE

LOCTITE® NORDBAK® HIGH IMPACT WEARING COMPOUND



25 lb. kit – 39918

Impact and Sliding Abrasion Resistance

A rubber-modified, two-part epoxy that offers wear and impact resistance properties 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, under typical dry service temperatures up to 250°F (121°C).

LOCTITE® FIXMASTER® FLEX 80™ PUTTY



1 lb. kit – 97423
25 lb. kit – 97422

Impact and Sliding Abrasion Resistance

This trowelable, two-part urethane rebuilds and repairs rubber parts and linings. It provides impact, abrasion and corrosion resistant protection to processing and pneumatic conveying equipment. Recommended for applications where speed of cure is not critical under typical dry service temperatures up to 180°F (82°C).

SPECIALTY WEAR RESISTANCE

LOCTITE® NORDBAK® CASTABLE WEARING COMPOUND



25 lb. kit – 98992

For Casting Wear Resistant parts

A three-part epoxy that can be cast into a mold or formed to make ceramic replacement parts. This pourable compound has ceramic beads, giving parts excellent resistance to wear and abrasion.

LOCTITE® NORDBAK® CERAMIC TILE ADHESIVE



20 lb. kit – 97762

For Securing Ceramic Tiles

A two-component, high strength epoxy for securing ceramic wear tiles to vertical, horizontal, or overhead surfaces. This trowelable compound offers excellent shock and impact resistance.

EXTREME CORROSION AND EROSION RESISTANCE

LOCTITE® NORDBAK® CHEMICAL RESISTANT COATING



12 lb. kit – 96092

Chemical Resistant Brushable Coating

This advanced, two-part epoxy is designed to protect equipment against extreme chemical attack and corrosion under typical dry service temperatures up to 150°F (65°C). It forms a smooth, glossy, low-friction finish that protects against turbulence and cavitation. Its low viscosity means it can be applied by brush or pressure sprayed.



Coating a pump volute with Loctite® Nordbak® Chemical Resistant Coating



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For your local Loctite® brand Adhesives and Sealants Specialist, call: 1.800.323.5106

For your nearest authorized Loctite® brand distributor, to place an order, to arrange an in-plant seminar or for technical product assistance, call: 1.800.LOCTITE (562.8483)

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Material Safety Data Sheets and Technical Data Sheets also available by 24-hour fax. 1.800.LOCTITE (562.8483) 1.800.263.5043 (within Canada)

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Wear Resistant Coatings Properties Chart

PRODUCT	Page #	Item Number	Container	COVERAGE (FT. ² @ 1/4" THICKNESS)	COLOR	MAXIMUM OPERATING TEMPERATURE (°F)	COMPREHENSIVE 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)	AGENCY APPROVALS				
SLIDING ABRASION AND WEAR RESISTANCE (Coarse/Large Particle)																	
Loctite® Nordbak® Wearing Compound	3	99813	5 lb. kit	1.75	Grey	250	16,000	90	30	7	2:1	2:1	NEHC				
		99812	25 lb. kit	8.75													
Loctite® Nordbak® Fast Cure Wearing Compound	3	96373	6 lb. kit	2.1	Blue	225	10,000	90	10	3	2:1	2:1	N/A				
Loctite® Nordbak® High Temperature Wearing Compound	3	99112	25 lb. kit	9	Grey	450	15,000	85	30	▼	4:1	3.9:1	N/A				
Loctite® Nordbak® Ultra High Temperature Wearing Compound	3	96392	25 lb. kit	9	Red	550	N/A	90	30	▼	2.44:1	2.85:1	N/A				
Loctite® Nordbak® Combo Bead Wearing Compound	3	96303	6 lb. kit	2.3	Grey	250	13,000	90	25	8	2:1	2:1	N/A				
Loctite® Nordbak® Low Odor Wearing Compound	3	41343	25 lb. kit	8.75	Grey	250	16,000	90	30	7	2:1	2:1	N/A				
SLIDING ABRASION AND WEAR RESISTANCE (Fine Particle)																	
Loctite® Nordbak® Pneu-Wear	4	98383	3 lb. kit	1.1	Grey	250	15,000	90	30	6	4:1	4:1	ABS, CFIA, NEHC, Lloyds				
		98382	25 lb. kit	9													
Loctite® Nordbak® Fast Cure Pneu-Wear	4	96363	6 lb. kit	2.1	Blue	225	12,000	90	10	3	2:1	2:1	CFIA				
Loctite® Nordbak® High Temperature Pneu-Wear	4	98372	25 lb. kit	8.8	Grey	450	15,000	90	30	▼	4:1	4:1	N/A				
Loctite® Nordbak® Ultra High Temperature Pneu-Wear	4	96332	25 lb. kit	8.8	Red	550	N/A	90	30	▼	2:1	2.27:1	N/A				
Loctite® Fixmaster® Wear Resistant Putty	4	98742	1 lb. kit	53	Grey	225	11,608	89	30	6	2:1	2:1	ABS, CFIA, NEHC, Lloyds				
		98743	3 lb. kit														
LIQUID/SLURRY TURBULENCE RESISTANCE																	
Loctite® Nordbak® Brushable Ceramic	5	98733	2 lb. kit	12*	Grey	200	12,500	85	30	6	2.75:1	4.8:1	ABS, CFIA, NEHC, Lloyds				
		98732	6 lb. kit	36*													
		96443	2 lb. kit	12*	White									15	5	2.8:1	4.5:1
Loctite® Nordbak® High Temperature Brushable Ceramic	5	96433	2 lb. kit	12*	Red	550	16,000	90	120	▼	2.6:1	4.25:1	N/A				
Loctite® Nordbak® Brushable Ceramic – Thin Mil	5	40592	2 lb. kit	12*	Grey	200	12,500	85	30	6	2.75:1	4.8:1	N/A				
		40591	2 lb. kit	12*	Blue									6	2.75:1	4.8:1	N/A
		40590	2 lb. kit	12*	Black									6	2.75:1	4.8:1	N/A
IMPACT WEAR RESISTANCE																	
Loctite® Nordbak® High Impact Wearing Compound	6	39918	25 lb. kit	8.75	Grey	250	15,000	85	30	6	2:1	2:1	N/A				
Loctite® Fixmaster® Flex 80™ Putty	6	97423	1 lb. kit	94	Black	180	N/A	87	10	8	100:40	72:28	ABS				
		97422	6 lb. kit	564													
SPECIALTY WEAR RESISTANCE																	
Loctite® Nordbak® Castable Wearing Compound	6	98992	25 lb. kit	277 in. ³	Grey	225	18,500	90	30	6	2:1	6.8:1	N/A				
Loctite® Nordbak® Ceramic Tile Adhesive	6	97762	20 lb. kit	12	Beige	200	14,000	88	60	12	1:1	3.7:1	N/A				
EXTREME CORROSION/EROSION RESISTANCE																	
Loctite® Nordbak® Chemical Resistant Coating	6	96092	12 lb. kit	74*	Grey	150	10,000	83	20	16	2.3:1	3.4:1	CFIA				

Properties based on mixing 1 lb. mass at 77°F, ultimate cure. * 20 mil thickness. ▼ Requires heat cure. See Technical Data Sheet. NEHC = Navy Environmental Health Center



✓ Distributor Information

✓ Material Safety Data Sheets

✓ Technical Data Sheets

✓ Product Application Assistance

✓ Product Literature

✓ Bill of Lading Code Information

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