

MICORLINE 320 LINER PRODUCT INFORMATION SHEET



GENERAL PROPERTIES:

MICORLINE 320 is an exceptionally corrosion and abrasion resistant, structural strength lining designed for immersion service at operating temperatures to 210°F. It features exceptional abrasion resistance, surpassing mild steel and AR plate. This excellent lining is unaffected by most acid and caustic solutions, covering a broad range of the PH scale. A combination of exceptional chemical resistance and superior abrasion resistance has produced a lining which greatly outlasts concrete, steel and stainless steel in its design applications.

MICORLINE 320 is a three component epoxy, mixed to form a trowellable mortar applied at 1/8 inch thickness. Conveniently preproportioned batches of material ensure accuracy and efficiency during application. **MICORLINE 320** has been designed for ease in handling, reducing the surface imperfections resulting from sticky, difficult materials. **MICORLINE 320** is easily applied to horizontal, vertical surfaces without sagging or tearing.. Quick and easy application and cure eliminate the need for extensive costly downtime.

The extremely dense surface of **MICORLINE 320** actually increases the flow of materials, preventing sticking, hang-ups and freeze ups and providing slip characteristics comparable to stainless steel. The Micor lining will not become rough with wear as do many cementitious and steel linings, wearing smooth even in the most abrasive environments.

MICORLINE 320 is applied with no seams to leak, no weak grout lines, or joints, and no rough spots or edges to hang up on. **MICORLINE 320** lining provides exceptional adhesion on concrete and steel resulting in excellent durability, structural strength and long lasting, maintenance-free service.

FEATURES:

- * Excellent chemical resistance
- * Exceptional structural strength
- * Immersion service to 210°F
- * Increases flows
- * Smooth wearing surface
- * No expanded metal needed
- * No sag or tear on vertical
- * Costs less than metal or tile
- * Eliminates costly downtimes
- * Abrasion resistance superior to mild steel
- * Outlasts steel, concrete and stainless
- * Easy to use and convenient
- * Conforms to any shape
- * Superior adhesion
- * Odorless installation
- * Non-stick finish
- * No hang ups
- * No welds to leak
- * Fast setting
- * No freeze-up
- * Spot repairs easily

AREAS OF APPLICATION::

tanks	surge tanks	pumps
stock chests	trenches	broke chests
chutes	starch tanks	liquor tanks
cyclones	screen bottoms	clarifiers
sumps	white water tanks	flotation cells
scrubbers	screw conveyor troughs	fan silos
storage tanks	conveying tunnels	wash boxes
plating pits	coal bins	zeolite tanks
plating tanks	pipe elbows	water tanks
hoppers	heavy media vessels	condensate tanks
filtration tanks	containment areas	seal tanks
sluices	fan pumps	duct work
jigs	fourdrinier pits	cells
acid pits	collection boxes	launderers
pan bottom	cones	effluent lines
pipes	flumes	thickeners
precipitators	ID fans	savealls
classifiers	columns	vats
curbs	walls	silos
bunkers	rinse tanks	settling tanks

SPECIFICATIONS:

Compressive Strength	13,900 psi
Abrasion Resistance	300 mg. loss
Adhesion - Concrete	300 psi (exceeds strength of concrete)
Adhesion - Steel	500 psi (exceeds range of tester)
Compressive Modulus	3.42 x 10 ⁵
Flexural Strength	5,600 psi
Flexural Modulus	1.93 x 10 ⁶
Heat Distortion Temp.	210°F
Tensile Strength	2,500 psi
Tensile Modulus	3.42 x 10 ⁴ psi

WORKING LIFE:

Mixed components approximately 30 minutes at 77°F.

COVERAGE::

80 square feet per 8 batch kit @ 1/8" thickness.

PRIMER AND SEALER:

MICORLINE 320 primer and sealer are sold in one gallon units. One unit will cover approximately 150 sq. ft.

HARDENING AND CURE:

MICORLINE 320 will harden in 2 hours at 70°F. Complete cure will require 24 hours at 70°F or 12 hours at 90°F.

STORAGE AND SHELF LIFE:

Kept clean and dry and stored at room temperature, shelf life of one year.

MICORLINE 320 LINER

PRODUCT INFORMATION SHEET

APPLICATION:

MICORLINE 320 is easy to use and requires no special skills in handling. READ AND UNDERSTAND THE M.S.D.S. SHEETS BEFORE USING. MICORLINE 320 is easily applied to horizontal and vertical surfaces and conforms to any shape without sagging or tearing.

MICORLINE 320 PRIMER is recommended for application on all 320 liner applications. Application of the primer on concrete penetrates the surface, tempering and strengthening it for a secure bond. On steel the primer aids in ease of application and wets the surface for a strong bond line. Mix the primer part A and allow it to begin to set for about 10 -30 minutes before applying the lining. The primer should be tacky when the lining is applied.

Mix MICORLINE 320 liner by combining and mixing the resin and hardener components. Transfer this mixture to an electric mixer and add one bag of MICORLINE 320 aggregate. Mix thoroughly for about 2 minutes. Apply the liner mortar evenly over the surface at approximately 1/8 inch thickness with a steel trowel. Close the lining by trowelling in one direction.

Apply MICORLINE 320 sealer to fill the pores of the lining for maximum corrosion resistance. Mix the sealer components thoroughly and apply with a roller or brush in a thin coat over the lining. The lining should be initially hardened but tacky during sealer application. Pull sealer down tightly with a squeegee to densify the surface and fill all pores, insuring a continuous surface.

SURFACE PREPARATION:

Surfaces must be clean, dry and rough prior to application of MICORLINE 320. Remove any existing coating, lining, grease, etc. from the surface. Prepare concrete by flash abrasive blasting, acid etching or scarifying. Steel may be prepared by abrasive blasting, with a hard sharp abrasive to provide a Nace #1 blast and a 3 to 4 mil profile in steel. As an alternative, steel may be abraded with a coarse sandpaper (No. 50 grit) or needle gun.

TEMPERATURE LIMITATIONS:

The MICORLINE 320 material MUST be between 70°F to 85°F prior to use. During the installation and cure, the surface and air temperature MUST be 60°F to 80°F. Once cured, it is ideal for applications in cooler and outdoor temperatures as well as temperatures to 210°F.

CLEAN UP:

Clean tools immediately with soap and hot water.

PACKAGING:

One 8B unit of MICORLINE 320 contains:
1 container of MICORLINE 320 component A
1 container of MICORLINE 320 component B
8 bags of MICORLINE 320 aggregate component C
Measuring cups for Resin and Hardener (A&B)

HANDLING PRECAUTIONS:

READ MSDS SHEET BEFORE USING! Prolonged skin contact can cause irritation. WEAR PROTECTIVE CLOTHING and CHEMICAL SPLASH GOGGLES to avoid eye contact. Ensure that the area is well ventilated. Use with proper ventilation equipment in confined areas. NEVER recap a container of mixed components, as the continuing reaction may cause the container to rupture violently. MICORLINE 320 is intended for commercial and industrial use only!

COMPLIMENTARY DATA:

Our full service lab and technical engineers are available to assist you. For complete information on MICOROX® systems, contact your local MICOROX® Dealer or our factory at 800-284-4308.

CHEMICAL RESISTANCE:

The following guide has been prepared to assist customers in determining the suitability of MICORLINE 320 for their applications. It is not meant to construe an express guarantee to actual service. We request that customers inspect and test our product to satisfy themselves as to suitability. Service of the MICORLINE 320 depends upon application and operating conditions.

<u>MATERIAL</u>	<u>CONCENTRATION</u>
Sulfuric Acid	30%
Hydrochloric Acid	30%
Acetic Acid	10%
Chromic Acid	10%
Citric Acid	10%
Ammonium Hydroxide	28%
Distilled Water	all
Xylene	all
Sodium Hydroxide	10%
Ethyl Alcohol	10%
Ethylene Dichloride	all
Toluene	all
JP-4 Jet Fuel	all
White Water	all
Trichloroethylene	all
Sodium Hypochlorite	3%

LIMITED WARRANTY: Micor Company Inc. warrants to the original purchaser of its products that they are in conformance to the formulation standards of Micor Company, Inc. and that such products are free from manufacturing defects. Original purchaser's only remedy is replacement of the product. Micor does not warrant or guarantee the workmanship performed by any person or company installing its products. In no event shall Micor be liable for any incidental or consequential damages. This warranty is expressly given in lieu of all other warranties express or implied, including the warranties of merchantability and fitness for use and all other obligations or liabilities on Micor's part. Micor neither assumes nor authorizes any person or persons to assume for us any other liability in connection with the sale of Micor products. This warranty shall not apply to any of Micor's products which have been subject to alteration, abuse or misuse. Micor makes no warranty whatsoever in respect to parts, materials or accessories not supplied by Micor Co. which are used in connection with its products. The term "original purchaser" in this warranty applies to that person, company or corporation to which Micor Company Inc. sold its product or products. The original purchaser accepts these terms and conditions and hereby expressly waives any claim to additional damages.

CAUTION: Always keep out of the reach of children.