



376F-60LT LOW TEMP CURE LINING



PRODUCT INFORMATION BULLETIN

DESCRIPTION

Enviroline® 376F-60LT is a low temperature cure version of Enviroline 376F-60 specifically designed to cure at temperatures down to 20°F (-7°C) and provide broad range chemical and solvent resistance. **Enviroline 376F-60LT** contains a proprietary mixture of flake and fiber reinforcement to meet API RP 652 (October 2006) guidelines as a thick film reinforced lining.

TYPICAL USE

Steel and concrete including petroleum bulk storage tanks, downhole tubular pipes, downhole casing exteriors, interior and exterior pipes, floors, tank pads, trenches, troughs, sumps and pits. Use in conjunction with API 653 inspection and API 652 guidelines as a thick film reinforced lining and allow internal inspection intervals to be set at the maximum time allowable – potentially 20 years.

BENEFITS

- Low temperature cure (to 20°F)
- Excellent adhesion
- Superior abrasion resistance
- Broad range chemical and solvent resistance
- Thick-film, single coat application (50-60 mils)
- Ultra low VOC

LIMITATIONS OF USE

Consult your Enviroline representative for specific recommendations.

TECHNICAL DATA

Weight (lbs/gal): 12.4
Volume Solids: 100%
Color(s): Green, Gray, Tan
Flash Point: >200° F
Hardness (Shore D min.): 70-75

Pot Life (@77° F): 20 minutes
Pot Life (@100° F): 10 minutes
VOC (mixed lbs/gal): 0.18
VOC (mixed g/l): 21
Recommended Thickness: 50-60 mils DFT

Temperature Resistance:

Non-Immersion, Dry Heat: 250° F (121°C)

Continuous immersion resistance is dependent on particular chemical exposure and temperature. Consult Enviroline representative for specific recommendations.

COVERAGE

Theoretical Coverage*: 1604 sq. ft per gallon @ 1 mil dry

@ 50 mils: 32 sq. ft. per gallon

@ 60 mils: 26 sq. ft. per gallon

**When ordering product, make allowances for any loss due to overspray, surface irregularities, etc. (approx. 15 – 20%).*

DRY & CURE SCHEDULE

Drying schedule at temperatures indicated and 50% relative humidity:

	20°F	30°F	45°F
Touch Dry	5 hours	2 hours	1 hour
Dry Hard	8 hours	4 hours	2 hours
Minimum Recoat	8 hours	4 hours	2 hours
Maximum Recoat	72 hours	36 hours	18 hours
Cure	7 days	3 days	24 hours

SURFACE PREPARATION

All surfaces must be clean and dry, free of dust, dirt, oil or other foreign matter. Steel surfaces shall be abrasive blasted to SSPC SP-5/Nace No. 1 White Metal finish with a minimum 3 – 5 mil angular profile for best results. Concrete shall be abrasive blasted or etched with 10% muriatic acid. Primer may be required for concrete. See Enviroline Technical Services Department for additional information.

APPLICATION EQUIPMENT

Plural component equipment is highly recommended for application. Utilize a pump with a 2:1 mix ratio and GRACO 45:1 or greater power ratio. Also needed are two 12 element 1/2" static mixers. Heated tanks and heated lines up to 150°F may be necessary. The resin fluid line should be 1/2" ID minimum, the hardener fluid line should be 3/8" ID minimum, and the high pressure solvent fluid line should be 1/4" ID minimum. A reversible tip (.029 - .035) is suggested. Keep in mind that plural component application requires volumetric check of the mix ratio (utilizing a ratio monitoring system) before and during the application process. Any variation in product color during application will indicate the plural pump is off ratio.

Airless spray equipment (GRACO 45:1, 56:1 or higher recommended) may also be used if the pot life is carefully monitored. Remove suction tube and place lower assembly in 5 gal. pail. Smaller areas may be trowel applied. Hoses should be 1/2" ID minimum (no longer than 150 ft.), ending with a 10 ft. 3/8" whip hose. A reversible tip (.035) is suggested. Pressure at the pump should be 100 psi or maximum recommended by equipment manufacturer. Teflon type packings are recommended and available from the pump manufacturer. Airless spray application requires careful and continuous monitoring of product mix temperature and periodic flushing of the lines with methyl ethyl ketone (MEK) or methyl

isobutyl ketone (MIBK). Once product temperature exceeds 125° F stop immediately and flush lines to avoid loss of the pump or other spray equipment.

For heavily pitted or porous steel, the spray-roll-spray technique is recommended. Spray apply approximately 50% of required film thickness followed immediately with a short nap roller or squeegee to work material into bottom of pitted areas. Follow the rolled or squeegee application with a spray application of the product to the remainder of the required film thickness. We recommend thinning the material with 2% Enviroline® 76T Thinner to facilitate in this type of application. It is important to understand that this is a single coat, continuous application procedure.

Consult your Enviroline Representative or Enviroline Technical Service Dept. for more information.

MIX RATIO

2:1 by volume.

APPLICATION CONDITIONS

Apply at 5° F (3° C) above dew point. Use the following chart for preferred temperature and humidity conditions. These conditions plus adequate ventilation must be maintained throughout the curing cycle.

	Substrate	Ambient	Humidity
Preferred	30-65° F	30-65° F	N/A
Minimum	20° F	20° F	5° above dew point

HANDLING

Store at moderate temperatures (65-85° F) prior to application for ease of handling and mixing. Additional heating may be required and is recommended for spray application.

THINNING

Up to 2% Enviroline 76T Thinner may be added, but is not normally required. Thinning reduces hanging qualities of the lining and will slow curing. For plural equipment, proportion thinner between resin and hardener according to 2:1 mix ratio. For airless spray equipment, add thinner while the resin and hardener are being thoroughly mixed. Consult an Enviroline Technical Representative before adding more than the recommended amount.

PRE-HEATING

For plural application, viscosity of the resin and hardener varies. For best results, heat resin side to max of 130°F and heat hardener side to max of 110°F. For airless application, heat each component to 90-95°F prior to mixing.

MIXING

For plural component application, pre-mix each component one minute; then use a plural component static mixer during the application process. For airless spray application, mechanically pre-mix each component one minute; then mix combined compound with mechanical mixer at 400-600 rpm for 3 to 4 minutes. Enviroline custom designed mixing blade is recommended.

CLEAN UP

Clean immediately with methyl ethyl ketone (MEK) or methyl isobutyl ketone (MIBK).

PACKAGING

One unit forms approximately 4 gallons consisting of two components:
Resin: 5 Gallon Pail **Hardener:** 2 Gallon Pail

Also available in 55 gallon drums. Please consult our Technical Services Department for additional information.

SHELF LIFE

2 years when stored at 75° F (24°C) unopened.

SHIPPING

F.O.B. Pompano Beach, Florida for domestic shipments, Ex-Works Pompano Beach for international shipments.

SAFETY

This product is for industrial use only and should be installed by qualified coating and lining specialists. Consult Material Safety Data Sheets for important health and safety information prior to use.

08/06*

**Enviroline continuously strives to improve its data sheets for the benefit of all users. The owner/applicator is responsible for obtaining the most recent Product Information Bulletin prior to the purchase or application of material.*