



399ABR ABRASION RESISTANT COATING



PRODUCT INFORMATION BULLETIN

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| DESCRIPTION | Enviroline® 399ABR is a 100% solids, thick-film single coat advanced hybrid epoxy system designed exclusively to provide high abrasion resistance. Enviroline 399ABR is a fast curing, high temperature resistant product that can be spray applied in a single coat with standard airless or plural component equipment. | |
| TYPICAL USE | Designed as a high abrasion resistant coating for potash mines, exterior pipelines and slurry tanks. | |
| BENEFITS | <ul style="list-style-type: none">- Superior abrasion resistance- Excellent flexibility- Excellent corrosion resistance- Excellent adhesion | <ul style="list-style-type: none">- Thick-film, single coat application (20-50 mils)- Fast curing (Immersion service in 8-10 hours)- Excellent weathering (may chalk w/ direct UV exposure)- High temperature resistance to 300° F |
| LIMITATIONS OF USE | This material contains abrasive material that may damage spray equipment. Consult your Enviroline representative. | |
| TECHNICAL DATA | Weight (lbs/gal): 12.6 Volume Solids: 100% Color(s): Green, Gray Flash Point: >200° F Hardness (Shore D min.): 75-80 | Pot Life (@100° F): 15 minutes VOC (mixed lbs/gal): 0 VOC (mixed g/l): 0 Recommended Thickness: 20-50 mils DFT |
| | Temperature Resistance: Non-Immersion, Dry Heat: 300° F (149° C) Continuous immersion temperature resistance is dependent on particular reagent exposure. Consult your Enviroline representative. | |
| COVERAGE | Theoretical Coverage*: 1604 sq. ft. per gallon @ 1 mil dry @ 20 mils: 80 sq. ft. per gallon @ 50 mils: 32 sq. ft. per gallon | |
| | <i>*When ordering product, make allowances for any loss due to overspray, surface irregularities, etc. (approx. 15 – 20%).</i> | |
| MINIMUM DRY TIME | 77°F and 50% relative humidity, ASTM D 1640: To Touch: 2 hours To Handle: 4 hours To Recoat: 2.5-4 hours | |
| CURE SCHEDULE | Shore D 75 – 80 @ 77°F and 50% relative humidity: For Immersion Service: 8-10 hours Shore D 75 – 80 @ 100°F and 50% relative humidity: For Immersion Service: 8 hours | |
| | Post Curing: It is not necessary for most applications, but Enviroline 399ABR may be post cured to expedite curing or increase chemical resistance for extremely aggressive environments. Post cure for a minimum of 2 hours at 250° F or 6-8 hours at 150° F for maximum resistance. Consult Enviroline Technical Services Department for specific application information. | |
| 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 or Swedish Standard Sa3, White Metal finish with a minimum 3 – 5 mil 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

Caution: The **Enviroline® 399ABR** contains fillers that can be very abrasive to pumps and spray equipment. Enviroline is not responsible for damage caused to application equipment. Airless spray system (GRACO 45:1, 56:1 or higher recommended). 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 recommended and are available from the pump manufacturer. Plural component equipment is also recommended, but not required. Keep in mind that plural component application requires volumetric check of the mix ratio. Consult Enviroline 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.

| | Coating | Substrate | Ambient | Humidity |
|------------------|-----------|-----------|-----------|----------|
| Preferred | 95-105° F | 50-120° F | 70-100° F | 0-90% |
| Minimum | 90° F | 50° F | 50° F | 0% |

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. Add only after the resin and hardener have been thoroughly mixed. Consult Enviroline technical representative before adding more than recommended amount.

PRE-HEATING

For airless application, heat each component to 95-105° F prior to mixing. Consult Enviroline Technical Department if using plural component equipment.

MIXING

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. Consult your Enviroline representative for more information.

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.

10/04*

**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.*



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