

Tyfo® PWC

Potable Water NSF-Listed Epoxy Coating

DESCRIPTION

Tyfo® PWC Epoxy Coating is a two-component, 100% solids, corrosion resistant epoxy that can be applied to dry surfaces or wet epoxy. It is formulated for broad range corrosion protection and is NSF-Listed safe for potable water and incidental food contact. Please refer to the NSF Listing for the NSF-61 Listed application.

USE

Recommended for potable water and wastewater facilities and structures, storage tanks, secondary containment, aquariums, pools, and general maintenance applications.

ADVANTAGES

- ICC-ES ESR-2103 listed product
- NSF-Listed Product
- Good high temperature properties
- Good low temperature properties
- Long working time
- High elongation
- Ambient cure
- 100% solvent-free

COVERAGE

One gallon of Tyfo® PWC will cover approximately 160 sq. ft. (15m²) at 10 mils. Actual surface coverages will depend on surface irregularities. Recommended thickness will vary depending on the type of application. Use of partial units is not recommended unless the volumetric proportions can be obtained accurately.

PACKAGING

Order in pre-measured 4-gallon units shipped in 5-gallon (19L) containers.

MIX RATIO

100.0 parts of component A to 42 parts of component B by volume. (100.0 parts of component A to 34.5 parts of component B by weight.)

SHELF LIFE

Two years in original, unopened container when stored in proper conditions.

STORAGE CONDITIONS

Store at 40° to 90° F (4° to 32° C).
Avoid freezing.

CERTIFICATE OF COMPLIANCE

- Will be supplied upon request, complete with state and federal packaging laws with copy of labels used
 - Material safety data sheets will be supplied upon request
 - Possesses 0% V.O.C. level per ASTM D-2369.
- 11/09 Tyfo® PWC

HOW TO USE THE TYFO® PWC EPOXY COATING

INSTALLATION

Tyfo® System to be installed by Fyfe Co. LLC trained and certified applicators. Installation shall be in strict compliance with the Fyfe Co. LLC Quality Control Manual.

SURFACE PREPARATION

The required surface preparation is largely dependent on the type of element. In general, the surface must be clean, and free of rust, scale, grease, oil, deposits and other contaminants. Fyfe Co. LLC may be consulted if further specifications are required.

CONCRETE & MASONRY: For maximum adhesion, surfaces may be prepared by waterblasting (pressure 3500 psi to 5000 psi), an acid etching/water cleansing method, sandblasting, or shotblasting.

STEEL: Grease, oil, and other contaminants may require removal with an approved solvent. Thereafter, the surface to receive the Tyfo® PWC Epoxy Coating should be prepared by "near white blast cleaning." Other alternatives such as high or ultrahigh pressure waterblasting or water/sand blasting may be used. The minimum surface profile for bonding is 2 mils.

CURED COMPOSITE: Surfaces may be prepared by roughening and then cleaning with water to remove any remaining residue. After cleaning, allow surface to dry thoroughly. Tyfo® PWC Epoxy Coating can be applied to the wet Tyfo® S or WS Epoxy composite at time of installation.

MIXING

For pre-measured units in 5-gallon containers, pour the contents of component B into the pail of component A. Mix ratio: 100.0 parts of component A to 44.4 parts of component B by volume (100 parts of component A to 31.0 parts of component B by weight). If material is too thick, drum heaters may be used on metal containers, or heat unmixed components by placing containers in 130° F (54° C) tap water or sunlight, if available, until the desired viscosity is achieved. Do not thin; solvents will prevent proper cure, and possibly cause pinholing and loss of adhesion. Mix thoroughly for five minutes with a low speed mixer at 400-600 RPM until uniformly blended.

APPLICATION

Tyfo® PWC may be applied with a brush or roller. An application thickness of 10 to 20 mils is recommended to prevent sagging on vertical or overhead surfaces, apply to a uniform thickness to obtain a smooth outer finish.

LIMITATIONS

Minimum application temperature of the epoxy is 40° F (4° C). **DO NOT THIN**, solvents will prevent proper cure.

EPOXY COMPONENT PROPERTIES

PROPERTY	TYPICAL TEST VALUE
Color	Component A is white Component B is clear to pale yellow
Pot Life	3 to 6 hours at 68° F (20° C)
Density at 68° F (20° C) (Pound/Gallon)	Component A = 11.41 (5.2kg/3.79L) Component B = 7.9 (3.6kg/3.79L) Mixed product = 10.61 (4.8kg/3.79L)

EPOXY MATERIAL PROPERTIES

Curing Schedule 72 hours post cure at 140° F (60° C).

PROPERTY	ASTM METHOD	TYPICAL TEST VALUE*
T _g	D-4065	180° F (82° C)
Tensile Strength ¹ , psi	D-638 Type 1	10,500 psi (72.4 MPa)
Tensile Modulus, psi	D-638 Type 1	461,000 psi (3.18 GPa)
Elongation Percent	D-638 Type 1	5.0%
Flexural Strength, psi	D-790	17,900 psi (123.4 MPa)
Flexural Modulus, psi	D-790	452,000 psi (3.12 GPa)

¹ Testing temperature: 70° F (21° C) Crosshead speed: 0.5 in. (13mm)/min. Grips Instron 2716-0055 - 30 kips

* Specification values can be provided upon request.

CAUTION!

COMPONENT A - Irritant:

Prolonged contact to the skin may cause irritation. Avoid eye contact.

COMPONENT B - Irritant:

Contact with skin may cause severe burns. Avoid eye contact. Product is a strong sensitizer. Use of safety goggles and chemical resistant gloves recommended. Remove contaminated clothing. Avoid breathing vapors. Use adequate ventilation.

SAFETY PRECAUTIONS

Avoid breathing vapors. Avoid contact with eyes and skin. Use of an approved respirator with an organic absorption cartridge is recommended for possible vapors. Rubber gloves, rubber boots, and protective suits are recommended for handling and application of this material. Safety glasses or a face shield are recommended to prevent eye contact.

FIRST AID

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water; contact physician immediately. For respiratory problems, remove to fresh air. Wash clothing before reuse. Refer to Material Data Safety Sheets (MSDS) for additional information on health and safety.

CLEANUP

Collect with absorbent material, flush with water. Dispose of in accordance with local disposal regulations. Uncured material can be removed with approved solvent. Cured materials can only be removed mechanically. Tools may be cleaned with an approved solvent.

SHIPPING LABELS CONTAIN

- State specification number with modifications, if applicable
- Component designation
- Type, if applicable
- Manufacturer's name
- Date of manufacture
- Batch name
- State lot number, if applicable
- Directions for use
- Warnings or precautions required by law

**KEEP CONTAINER TIGHTLY CLOSED.
NOT FOR INTERNAL CONSUMPTION.
CONSULT MATERIAL SAFETY DATA SHEET
(MSDS) FOR MORE INFORMATION.
KEEP OUT OF REACH OF CHILDREN.
FOR INDUSTRIAL USE ONLY.**

Fyfe Co. LLC

Tyfo® Fibrwrap® Systems

8380 Miralani Drive, Suite A, San Diego, CA 92126

Tel: 858.642.0694 Fax: 858.444.2982

E-mail: info@fyfeco.com Web: <http://www.fyfeco.com>

Statement of Responsibility: The technical information and application advice in this publication is based on the present state of our best scientific and practical knowledge. As the nature of the information herein is general, no assumption can be made as to the product's suitability for a particular use or application, and no warranty as to its accuracy, reliability or completeness, either expressed or implied, is given other than those required by State legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use. Field service, where provided, does not constitute supervisory responsibility. Suggestions made by the Fyfe Co., either verbally or in writing, may be followed, modified or rejected by the owner, engineer or contractor since they, and not the Fyfe Co., are responsible for carrying out procedure appropriate to a specific application.