

# Tyfo® WP

## Wet - Prime Epoxy

### DESCRIPTION

Tyfo® WP is an epoxy formulation developed to provide a primer/membrane undercoat specifically for use in wet, damp, or moist substrates. Tyfo® WP is NSF-Certified. Please refer to the NSF Listing for the NSF-61 Certified application.

### USE

This material is suggested for use in application where moisture will interfere with the normal adhesion of epoxy materials to bondable substrates. The material is used as a primer under the Tyfo® Fibrwrap® System.

### COVERAGE

One unit of Tyfo® WP should cover approximately 75 to 150 sq. ft. (7 to 14m<sup>2</sup>) per gallon. When used as a prime coat the coverage is highly dependent upon the existing surface condition.

### PACKAGING

Order pre-measured units in 5-gallon (19L) DOT-approved containers.

### MIX RATIO

100.0 parts of component A to 72.0 parts of component B by volume. (100 parts of component A to 64.0 parts of component B by weight.)

### SHELF LIFE

One year when stored in proper conditions.

### STORAGE CONDITIONS

Store below 90° F (32° C) and do not allow to freeze. This material should be stored in a cool place. Temporary storage should not be in areas of high temperatures, particularly the component A. The lids of both components should be kept tightly sealed.

### 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.

### HOW TO USE TYFO® WP EPOXY

### 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 being strengthened. In general, the surface must be clean, dry and free of protrusions. Column surfaces that will receive continuous wraps typically require only a broom cleaning. Discontinuous wrapping surfaces (walls, beams, slabs, etc.) typically require a light sandblast, grinding or other approved methods to prepare for bonding. Mechanical anchors are incorporated in some designs. The Fyfe Co. LLC engineering staff will provide the proper specifications and details based on the project requirements.

### MIXING

Add the contents of the component B pail to the component A pail and mix thoroughly with a low speed shear mixer. One unit of component A must be used with one unit of component B. Additional mixing time will be needed when working in cooler weather. If possible, prior to mixing, warm the component A to a temperature of 70 to 75° F (21 to 24° C) for quicker mixing.

### APPLICATION

Tyfo® WP may be applied with a brush, roller or trowel. Use care to apply an even coat over the entire surface to help prevent sagging.

### 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
Net Weight	Component A = 21.40 lbs. Component B = 13.70 lbs.
Color	Component A is clear Component B is amber
Final Consistency	Moderately thin liquid form Suitable for brush or roller application
Pot Life	1-3 hours at 60° - 80° F (16° - 27° C)
Density at 68 F (20 C), pounds/gallon	Component A = 9.41 (1.13 kg/L) Component B = 8.27 (0.99 kg/L) Mixed Product = 8.95 (1.07 kg/L)

## EPOXY MATERIAL PROPERTIES

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

PROPERTY	ASTM METHOD	TYPICAL TEST VALUE*
T <sub>g</sub>	D-4065	154° F (68° C)
Tensile Strength <sup>1</sup> , psi	D-638 Type 1	8,130 psi (56.0 MPa)
Tensile Modulus, psi	D-638 Type 1	309,100 psi (2.13 GPa)
Elongation Percent	D-638 Type 1	3.7%
Flexural Strength, psi	D-790	15,900 psi (109.6 MPa)
Flexural Modulus, psi	D-790	369,400 psi (2.55 GPa)

<sup>1</sup> 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. Use of an organic vapor respirator recommended.

#### PRECAUTIONS

Field applicators should exercise caution when using this material. Under normal use conditions, application with gloves and work suits is sufficient to protect workers. Repeated contact to exposed skin for prolonged periods of time has been known to produce skin irritations in persons with sensitive skin. If this occurs, individuals should avoid further exposure to these materials.

#### 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.

#### CLEANUP

Tools may be cleaned with the usual solvents (MEK, Acetone, etc.). Check with local authorities before using solvents. Once materials have hardened, removal may only be accomplished using mechanical methods.

#### 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, San Diego, CA 92126

Tel: 858.642.0694 Fax: 858.444.2982

E-mail: [info@fyfeco.com](mailto: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.