

Tyfo® MB-3

High Performance Adhesive

DESCRIPTION

Tyfo® MB-3 is a two-component epoxy adhesive which bonds a wide variety of metals and fiber reinforced polymers. It provides excellent peel and impact strengths even in low temperature environments.

USE

Tyfo® MB-3 is specially designed to bond FRP to steel and/or steel to steel.

ADVANTAGES

- Excellent adhesive properties
- Bonds to metal and polymers
- UV exposure resistance
- Good high temperature properties
- Good low temperature properties
- Long working time (1-2 hours)
- High elongation
- Ambient cure
- Non-sag
- Excellent resistance to dilute acids, alkalis, solvents, greases, oils and moisture

COVERAGE

One gallon of Tyfo® MB-3 will cover approximately 150 sq. ft. (14m²) of surface area at 0.01" (0.25mm) thick. The existing condition of the surface as well as the temperatures of both the epoxy and application surface will affect the coverage estimation.

PACKAGING

Order in pre-measured units in 1-gallon containers.

MIX RATIO

100.0 parts of component A to 30.0 parts of component B by volume. (100 parts of component A to 25.0 parts of component B by weight.)

SHELF LIFE

One year in original, unopened and properly stored container.

STORAGE CONDITIONS

Store in a cool place. Temporary storage of these components should not be in high temperatures, particularly the "A" component. The lids of both components should be kept tightly sealed. 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.

HOW TO USE

THE TYFO® MB-3 ADHESIVE

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

Remove dust, debris, grease, or other loose contamination from surface to be bonded. Polymers and plastics may only require simple cleaning prior to bonding. Some surfaces may require abrading for best performance.

APPLICATION

Apply blended Tyfo® MB-3 to substrates and join.

Important: Bonded surfaces must remain in contact until full cure is achieved.

MIXING

Mix ratio: 100.0 parts of component A to 30.0 parts of component B by volume (100 parts of component A to 25.0 parts of component B by weight). Do not thin; solvents will prevent proper cure. Mix thoroughly for five minutes with a Tyfo® low speed mixer at 400-600 RPM until components are thoroughly dispersed. Excessive mixing will shorten pot life.

SET UP TIME

Tyfo® MB-3 is formulated to give a minimum of 1 to 2 hours working time. Cooler temperatures will usually extend and warmer temperatures shorten the working time.

LIMITATIONS

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

ADHESIVE COMPONENT PROPERTIES

Mix Ratio, by volume	100:30
Color	Black or Gray
Viscosity, cps	
Component A (Black)	180,000
Component B	200
Component A & B	55,000
Gel Time, 150 grams	250 minutes
Thin Film Set	14 - 16 hours
Bond Strength to Metal/Aluminum/Concrete	Excellent
Compressive Strength, psi	4,088
Tensile Strength, psi	2,423
Tensile Elongation, %	2.7

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.

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

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.

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.**

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