

PRODUCT DATA

3 03 01 00 **Maintenance of Concrete****MASTERPATCH® 95****Three-component metallic-aggregate epoxy repair mortar****Description**

Masterpatch® 95 consists of a 100% reactive modified-aliphatic amine hardener, a liquid epoxy resin-based material, and specially processed and graded metallic aggregate. It is used to create durable repairs in environments with heavy-duty usage.

Yield

One unit yields approximately 0.21 ft³ (0.0059 m³), which is approximately 10 ft² (0.9 m²) at a thickness of 1/4" (6 mm).

Packaging

3-1/2 gallon (13 L) unit pails, containing Part A, Part B, and the metallic aggregate: it can be used to mix the 3 components.

Resin, Part A:
0.41 gallons (1.6 L)

Hardener, Part B:
0.24 gallons (0.9 L)

Metallic Aggregate, Part C:
24 lbs (10.9 kg)

Color

Black (when mixed)

Features

- Epoxy resin based
- Featheredging capability surface
- Metallic aggregate
- Creates a dense repair surface
- Traffic ready in 4 – 6 hours at 70° F (21° C)
- Extremely high impact toughness environments

Benefits

- Excellent bond to base concrete
- Thin repairs possible; repairs leave smooth
- Long-lasting repairs
- Resistant to oil and grease penetration
- Minimal downtime required
- Ideal for manufacturing and industrial

Shelf Life

2 years when properly stored

Storage

Store in unopened containers in a clean, dry area between 45 and 90° F (7 and 32° C).

Where to Use**APPLICATION**

- Rapid repairs requiring high strength for heavy-duty usage
- Repair of worn or spalled concrete floor joints
- Filling saw-cut control joints in indoor floors (cured at least 60 days)
- Repairing spalled or worn areas in industrial concrete floors

LOCATION

- Indoor only

How to Apply**Surface Preparation**

1. New concrete must be fully cured (28 day minimum).
2. Remove grease, wax, oil contaminants, and curing compounds by scrubbing with an industrial-grade detergent or a degreasing compound.

3. Follow with mechanical cleaning; remove weak, contaminated, or deteriorated concrete. Do not use a method of surface preparation that will fracture the concrete. Verify the absence of microcracking or bruising in accordance with ICRI Guideline No. 03732.
4. Follow mechanical cleaning with vacuum cleaning.

Mixing

1. Use a slow-speed drill (400 – 600 rpm) with a Jiffy-type paddle or an appropriately sized mortar mixer.
2. Mix each component separately before mixing together.
3. Add Part B to Part A in the 3-1/2 gallon pail provided. Always mix complete kits. Scrape the sides of the containers to ensure the proper mix ratio and a complete reaction.
4. Mix for approximately 2 minutes with a slow-speed drill and Jiffy-style mixing paddle at 400 – 600 rpm. Keep the paddle below the surface to avoid entrapping air. Do not mix by hand.
5. Add the metallic aggregate and mix all three components an additional 1 – 2 minutes to achieve an easily trowelable mortar.

Technical Data

Composition

Masterpatch® 95 consists of a 100% reactive modified-aliphatic amine hardener, a liquid epoxy resin-based material, and specially processed and graded metallic aggregate.

Test Data

PROPERTY	RESULTS	TEST METHODS
Compressive strengths , psi (MPa), 2" (51 mm) cubes cured at 70° F (21° C)		ASTM C 109, modified
12 hour	3,900 (27)	
24 hour	5,900 (41)	
7 days	7,000 (48)	
28 day	7,600 (52)	
Tensile strength , psi (MPa)		ASTM C 307
7 day	1,800 (12)	
28 day	1,900 (13)	
Flexural strength , psi (MPa)		ASTM C 348
7 day	3,600 (25)	
28 day	3,800 (26)	
Shear bond , psi (MPa)		ASTM D 882
7 day	2,400 (17)	
28 day	2,400 (17)	
Pot life , min, mixed material at 70° F (21° C)	45	

Chemical Resistance

Laboratory and field testing indicate good or excellent resistance to splashes and spills for the following chemicals.

CHEMICAL	RESULTS
Aromatic solvents	Ethylene glycol
Gasoline	Calcium chloride
Butyl cellosolve	Sodium chloride
Ethanol	Potassium hydroxide, 10%
Motor oil	Sodium hydroxide, 50%
Brake fluid	Ammonium hydroxide, 25%

Test results are averages obtained under laboratory conditions. Expect reasonable variations.

Unless otherwise noted, test samples were cured 7 days at 73° F (23° C) and 50% relative humidity.

Application

1. Place Masterpatch® 95 into the repair area and level the material.
2. Allow the patch to stiffen.
3. Finish in one direction only and within approximately 30 – 45 minutes after mixing at a temperature of 70° F (21° C).

Curing

Because Masterpatch® 95 is an epoxy repair mortar, wet or membrane curing is not recommended. Air cure only.

Clean Up

Remove uncured material with a suitable solvent like acetone or methyl ethyl ketone. Remove hardened epoxy with a commercial epoxy or paint-stripper solvent according to the manufacturer's recommendations.

For Best Performance

- Precondition these materials to approximately 70° F (2° C) for 24 hours before using.
- Ambient temperatures should be as close as possible to 65 to 85° F (18 to 21° C).
- For best results, do not apply this product at ambient or floor temperatures below 60° F (16° C) or above 90° F (32° C).
- Do not add water or solvents to any component.
- Do not alter mixing proportions; mix complete units only.
- Always mix the resin and hardener together before adding the aggregate.

- Do not use where repairs will later be exposed to ambient temperatures below 20° F (-7° C) or higher than 120° F (49° C).
- Do not use where there is constant exposure to materials that rapidly attack epoxy resins or iron (e.g., acids).
- Do not use where a dark-colored patch would be objectionable.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health and Safety

MASTERPATCH® 95 PART A RESIN

Warning

Contains epoxy resin

Risks

May cause skin, eye and respiratory irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Ingestion may cause irritation.

Precautions

Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Keep container closed when not in use. Wash thoroughly after handling. DO NOT take internally. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

For additional information on personal protective equipment, first aid, and emergency procedures, refer to the product Material Safety Data Sheet (MSDS) on the job site or contact the company at the address or phone numbers given below.

Proposition 65

This product contains materials listed by the State of California as known to cause cancer, birth defects or other reproductive harm.

VOC Content

1.5 g/L or 0.01 lbs/gal less water and exempt solvents when components are mixed and applied per Manufacturer's instructions.

MASTERPATCH® 95 PART B HARDENER

DANGER – CORROSIVE

Contains benzol alcohol, isophorone diamine, cycloaliphatic amine, trimethylhexamethylenediamine.

Risks

Contact with skin or eyes may cause burns. Ingestion may cause irritation and burns of mouth, throat and stomach. Inhalation of vapors may cause irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Repeated or prolonged contact with skin may cause sensitization. Reports associate repeated or prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

Precautions

DO NOT get in eyes, on skin or clothing. Wash thoroughly after handling. Keep container closed. DO NOT take internally. Use only with adequate ventilation. DO NOT breathe vapors. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

For additional information on personal protective equipment, first aid, and emergency procedures, refer to the product Material Safety Data Sheet (MSDS) on the job site or contact the company at the address or phone numbers given below.

Proposition 65

This product does not knowingly contain materials listed by the State of California as known to cause cancer, birth defects or other reproductive harm.

VOC Content

0 g/L or 0 lbs/gal less water and exempt solvents when components are mixed and applied per manufacturer's instructions.

MASTERPATCH® 95 PART C AGGREGATE

Caution

Contains activated carbon, silicon, inorganic lead.

Risks

May cause eye irritation. May cause skin irritation.

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Use chemical safety goggles, impervious gloves and protective clothing. Before opening the packages, read all warning labels. Follow all precautions.

First Aid

In case of eye contact, flush immediately with plenty of water for 15 minutes and call a physician. For skin, wash thoroughly with soap and water. If swallowed, DO NOT induce vomiting. Have victim drink water if conscious. Obtain medical attention immediately. DO NOT give anything to an unconscious person.

For additional information on personal protective equipment, first aid, and emergency procedures, refer to the product Material Safety Data Sheet (MSDS) on the job site or contact the company at the address or phone numbers given below.

Proposition 65

This product contains materials listed by the state of California as known to cause cancer, birth defects, or reproductive harm.

VOC Content

0 lbs/gal or 0 g/L.

**For medical emergencies only,
call ChemTrec (1-800-424-9300).**

**BASF Construction Chemicals, LLC –
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Customer Service 800-433-9517

Technical Service 800-243-6739



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Form No. 1019331 7/07

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