

MasterFlow[®] 400

Fast curing, high strength, flowable epoxy resin grout

DESCRIPTION

Masterflow 400 is a solvent-free fast curing, filler extended grout, based on modified epoxy resin and is designed for use as a precision, heavy duty chocking grout for engineering applications. It is supplied as a three component system consisting of epoxy resin, combined with inert fillers and the hardener, to produce a high viscosity flowable liquid grout suitable for voids of 10-80mm.

RECOMMENDED USES

- Machinery with high dynamic loads and vibration.
- Backing of steel liners of ore crushing machinery in mines and quarries.
- In corrosive environments where chemicals, oils and solvents make cementitious grouts unsuitable.
- Production line equipment that must resume operations with minimum downtime.
- Machinery base plates, crane rails, anchor bolts, hold down bolts and heavy equipment where tensile strength greater than cementitious systems can provide are required.

FEATURES AND BENEFITS

- **Resistance to vibration and impact** – Particularly applicable where cycles of compression/ tension make cementitious grouts unsuitable
- **Minimum shutdown** – High early strength allows for fast return to service during shutdowns.
- **Excellent chemical resistance** – Maximum protection against attack from mineral acids, oils, fats, fuels, and strong alkali and salt solutions and lubricating and hydraulic oils
- **High bond strength** – Tenacious adhesion to prepared surfaces and requires no priming.
- **Supplied in pre-measured kits** – Eliminates the need for complicated on-site measuring and ensured product performance

PROPERTIES

Mixed resin and hardener only	
Compressive Strength @ 25°C (ASTM C579)	50 MPa @ 6 hours 80 MPa @ 1 days 90 MPa @ 3 days 100 MPa @ 7 days
Flexural strength @ 25°C (ASTM C 580 part 7)	27.5 MPa @ 7 days
Tensile Strength @ 25°C (BS 6319 Part 7)	13 MPa @ 7 days
Pot life @ 25°C @ 40°C	60 minutes 30 minutes
Bond strength	>2. MPa (concrete failure)
Setting time @ 25°C	2 hours

The performance data is typical and based upon controlled laboratory conditions. Actual performance on the job site may vary from these values based on actual site conditions.

	Part A	Part B	Part C	Mixed
Supply Form	Paste	Liquid	Powder	Paste
Colour	Grey	Amber	sandy	Grey
Mix Ratio				3:1:16 pbw
Density (Mixed)				2.0-2.1kg/L
Application Temperature				10°C - 40°C
Service Temperature:				10°C - 40°C

APPLICATION

For information about application, please obtain a copy of the BASF "Application Guide for Masterflow Epoxy Grouts" from your local representative.

ESTIMATING DATA

Masterflow 400 is available in a three-component kit of 20 kg which yields (when mixed) 10 litres.



The Chemical Company

MasterFlow[®] 400

PACKAGING

Two-component system available in 20kg kit comprising Part A (3 kg) + Part B (1 kg) + Part C (16 kg).

CURING

No damp curing or special curing compounds are required. Cure time will vary depending on quantity mixed and placed and ambient temperature. Initial set at 23°C will be in 2-3 hours. **Masterflow 400** will be fully cured with maximum physical strength and chemical resistance at 7 days at 23°C. Do not install equipment before full cure has been attained or creep may occur.

Note: Curing rates and strength gain are retarded at lower temperatures - curing will not occur below 5°C.

SHELF LIFE

Masterflow 400 has a shelf life of 12 months if stored unopened in original containers at moderate temperatures.

PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the BASF Material Safety Data Sheet (MSDS) from our office or our website.

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STATEMENT OF RESPONSIBILITY (Disclaimer)

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NOTE

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