

# MASTERFLEX<sup>®</sup> 472/474

Single component, polyurethane based, elastomeric joint sealants

## Description of Product

Masterflex 472 and 474 are chemically similar, Single component joint sealant materials based upon polyurethane resins. They have been formulated with different modulus of elasticity and Shore A hardness which makes them suitable for slightly different applications, (see below).

## Fields of Application

Masterflex 472 and 474 have been formulated for:

- interior and exterior use
- joint sealant for walls, and ceilings
- joint sealant for expansion joints in buildings and civil works
- sealant for prefabricated concrete elements
- use in permanently submerged surfaces
- use on joints with up to 25% movement

In addition Masterflex 474 can be used for:

- internal floor joints

Contact the Technical Department of your local BASF Construction Chemicals office regarding any application required not mentioned here.

## Features and Benefits

- High level of elasticity (up to 25%)
- Excellent recovery capacity
- High resistance to weather and ageing. Resistant in tropical climates
- Does not harden over time, even at temperatures between -30° C and + 80°C
- Does not exhibit thermoplasticity. (Does not soften with heat).
- Excellent UV resistance
- Minimum tendency to staining/plasticiser migration
- Single component, easily applied
- User friendly – excellent extrudability/gunability

## Technical Data/Typical Properties

Typical Property	Masterflex 472	Masterflex 474
Density	Approx. 1,30g/cm <sup>3</sup>	Approx. 1,30g/cm <sup>3</sup>
Temperature for application	Between +5°C and +35°C	Between +5°C and +35 °C
Permanent expansion capacity	Approx. 25%	Approx. 20%
Skin formation @20°C	Approx 1h30min	Approx 1h
Temperature resistance	Between -30°C +80°C	Between -30°C +80°C
Cure speed	Approx. 2 mm/24hours	Approx. 3 mm /24hours
Hardness Shore A	15 -25.	Approx. 30
Elongation at break (ISO 8339):	> 600%	> 450%
Recoverability	> 80%	> 80%
Modulus of elasticity (ISO 37) @20°C	Approx. 0,25 N/mm <sup>2</sup>	Approx. 0,45N/mm <sup>2</sup>

## Application Procedure

### Preparation of Substrate

Must be clean, sound and dry. All traces of dust, oil and other dirt must be removed. It is especially important to remove traces of laitence and cement grout. In general, a minimum direct tensile strength of 1.5N/mm<sup>2</sup> is required.

For the joint sealant to function correctly it is essential that bond breaker tape or polyethylene closed cell backer rod be used to regulate joint depth and prevent three sided adhesion.



The Chemical Company

#### Joint design

Again to ensure long term performance the depth of the joint should be designed to be approximately half of the width especially on joints >25mm wide.

#### Coverage

Approximate usage on a 20 mm x 20 mm joint is:-

1.5 Lm/600 ml  
0.75 Lm/310 ml

(width x depth x length = litres)

#### Priming

On well prepared dry, sound concrete older than 28 days, masonry or metal or glass surfaces Masterflex 472 and 474 do not require a primer.

For all other situations use a primer as indicated below:

**Highly Porous substrates;** Subject to high degrees of movement or traffic eg concrete, masonry, renders : Elastoprime 135

**Non-porous substrates;** Subject to high degrees of movement or traffic eg metals, ceramics : Elastoprime 145

#### Application

The product is supplied ready for application. Cut open the foil sausage (or the nozzle) at one end and place in a manual or pneumatic gun and apply immediately. The product should be tooled smooth with a spatula or with non-alcoholic liquid to create a concave surface free of bubbles. It can be applied directly both horizontally and vertically.

#### Colour

White, Grey other colours available on request (minimum batch quantities).

#### Storage

Cool dry warehouse conditions

#### Shelf Life

12 months in unopened original containers when stored as indicated above

BASF Construction Chemicals (UK) Ltd,  
Albany House,  
Swinton Hall Road Swinton,  
Manchester M27 4DT  
Tel: +44 (0) 161 794 7411  
Fax +44 (0) 161 727 8547  
[www.basf-cc.co.uk](http://www.basf-cc.co.uk)

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#### Health and Safety

\*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

#### Solvent Based Products

Use in well ventilated areas; avoid inhaling. Suitable respiratory equipment may be needed, eg when spraying. Can cause skin, eye irritation. Wear protective eye shields and gloves during use. Do not smoke or allow sparks or naked lights when stored or in use.

#### Resin Products

Can cause irritation, dermatitis or allergic reaction. Use protective equipment particularly for skin and eyes. Use only in well ventilated areas.

#### Spillage

Chemical products can cause damage; clean spillage immediately.

#### Disclaimer:

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.