

MasterSeal® M 678

Rapid curing, chemical resistant, elastomeric waterproofing membrane

DESCRIPTION

MasterSeal M 678 is a solvent free, two component, high performance polyurea hybrid based waterproofing membrane, with high resistance to common chemicals. Using a specially designed spraying machine, the two components are preheated and spray applied, to a rapid curing, elastomeric, waterproofing membrane.

RECOMMENDED USES

MasterSeal M 678 is recommended for waterproofing of large structures exposed to aggressive waters, containing potable water and other containment structures.

Typical application areas include:

- Water containment areas (potable and contaminated)
- Primary & Secondary containment tanks
- · Waste water treatment tanks
- Protection & waterproofing of infrastructures.

Also can be applied on:

- Flat and architectural roofs.
- Horizontal and vertical substrates.

FEATURES AND BENEFITS

- **Fast reacting** Rapid installation. Does not run when applied on vertical surfaces
- Seamless No risk of leaky seams and laps.
- Spray applied Fast installation on large surfaces; easy application on complex details.
- Fully bonded Eliminates water collection behind membrane even if punctured.
- High tensile strength Excellent ability to accept movements without rupturing.
- Elastomeric Excellent crack-bridging ability.
- High tear resistance Minimised risk of damage to membrane in service.
- Low T_g of -20°C Remains elastomeric at very low temperatures. Performance unaffected in below freezing conditions.
- Solvent-free Improved safety
- Potable water contact approved suitable for tanks containing drinking water.

PERFORMANCE DATA

Shore A hardness, DIN 53505	>85
Tensile strength, DIN 53504, N/mm ²	>16 N/mm ²
Elongation, DIN 53504, %	>500
Tear strength, ASTM D624, kg/cm	>70
Low temperature flexibility at -35°C	No crack
Weathering QUV 1000 hours ASTM G154	No cracks No Delamination
Suitable for contact with potable water BS 6920	Passed

PROPERTIES

Mixing ratio, A : B, by volume	1:1
Density, at 25°C, kg/L	
Part A	1.03
Part B	1.10
Viscosity, at 25°C, cps	
Part A	1000 ± 200
Part B	1250 ± 200
Gel time	8 ~ 12 sec
Tack free	~60-120 sec
Application temperature of Parts A & B	65-70°C
Application temperature (Ambient and substrate), °C	10 to 40
Permissible max. relative humidity during application, %	85

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.



MasterSeal® M 678

APPLICATION

For information about application, please obtain a copy of the Master Builders Solutions "Application Guide for **MasterSeal M 678**" from your local representative.

Tips for optimal performance

- For optimum chemical and mechanical performance thickness's greater than 1.5mm should be used.
- For optimum spray results the material should be heated to 60-70°C.
- Store MasterSeal M 678 cool conditions in hot weather and warm conditions in cold weather.
- Repair voids, cracks and unevenness ir substrates before application.
- Remove all surface contaminants and ensure substrate is dry.
- Avoid application during rain.
- Agitate Part A before application.
- Apply by spraying uniformly to recommended thickness using recommended spray machine.

ESTIMATING DATA

MasterSeal M 678 is applied approximately at $1.05 - 2.1 \text{ kg/m}^2$. This corresponds to a cured film thickness of approx. 1.0 - 2.0 mm. Details, corners require a higher coverage rate up to 4.0kg/m^2 or more.

PACKAGING

MasterSeal M 678 Part A and B is supplied in 200kg drums.

SHELF LIFE

MasterSeal M 678 has a shelf life of 12 months. Store out of direct sunlight, clear of the ground on pallets protected from rainfall

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 Master Builders Solutions Material Safety Data Sheet (MSDS) from our office or our website.

® = registered trademark of a MBCC Group member in many countries of the world

MAP#MasterSeal M 678 v3. 01.2023

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a 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 law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified, or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

MB Solutions Singapore Pte Ltd

1 Harbourfront Avenue #07-07/08 Keppel Bay Tower, Singapore 098632

Tel: +65 6232 4888