

Mulseal Plus

Economical rubber / bitumen damp-proofing coating

USES

- Damp proof sandwich membrane
- Waterproofing of retaining walls, concrete road surfaces, etc.
- Vapour barrier on cladding panels
- Repairing fine cracks and crazing of asphalt surfaces
- Key joints and dowel bars

ADVANTAGES

- Dries to a water resistant, flexible film
- Excellent adhesion to most surfaces
- Low water vapour permeability
- May be applied to "green" or damp concrete
- Resistant to sulphates and ground salts

DESCRIPTION

Mulseal Plus is a liquid single component damp proof membrane formulated on a blend of natural rubber latex and bitumen emulsions, combined with special chemicals to ensure ease of application and long service life. The bitumen content of Mulseal Plus ensures good damp proofing while the rubber content imparts elasticity and enhances adhesion to a variety of surfaces. Mulseal Plus may be applied to concrete, stone, brickwork and metal surfaces, in coating or sandwich membrane applications.

TECHNICAL SUPPORT

Parchem offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.

DESIGN CRITERIA

SANDWICH MEMBRANE

Mulseal Plus is recommended as a damp proof sandwich membrane on bridge decks, between concrete slabs or pours, and as a protective membrane to bridge piers,

abutments and other substructures prior to back filling. Where it is used as a sandwich membrane in floors, the coating of Mulseal Plus should be continued up the walls to link with the damp course.

KEY JOINTS AND DOWEL BARS

Mulseal Plus is recommended as a coating on key joints and dowel bars. Provided the Mulseal Plus is allowed to dry prior to pouring the next section of concrete, it forms an effective slip layer and so allows relative movement between sections.

EXTERNAL WALLING AND CLADDING

Mulseal Plus is recommended as a coating on external walls to prevent water entry, and may be applied onto pre-cast or in-situ concrete, brick or block walls, or composite cladding panels. Mulseal Plus is also suitable as a vapour barrier on panels or as a low cost waterproofing coating to concrete, asphalt and bituminous felt roofs.

CRACK REPAIR

Mulseal Plus is recommended for repair of cracked or crazed surfaces or other forms of surface porosity. Mulseal Plus may be used to directly fill cracks up to 5 mm width. Larger cracks should be chased out to at least 10 mm width and repaired with any appropriate joint sealant, eg. Plastiseal.

PROPERTIES

Data quoted typical for this product, but do not constitute a specification.

Form:	Thixotropic liquid
Application temperature:	5°C - 50°C
Service temperature:	Minus 20°C - + 80°C
Drying time:	4 - 6 hours at 20°C, 60% RH. Time will be extended under cool or humid conditions
Recoating time:	12 - 36 hours
Solids content:	60 - 65%

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

Surfaces must be clean and sound, free from dust, oil, grease or other contaminant. Mulseal Plus may be applied to damp surfaces or to uncured concrete, but there must be no free water present during application. Mulseal Plus is a water-borne compound which is soluble in water initially, so must not be applied during rain or when rain is expected. If an applied Mulseal Plus film has been degraded by premature contact with eg rain water, a further coating of Mulseal Plus must be applied. If Mulseal Plus containers have been standing for longer than about 2 months, it is advisable to stir contents thoroughly prior to use.

PRIMING

Porous surfaces such as concrete, blockwork etc. should be primed with 1 coat of Mulseal Plus diluted 1:1 with water. After priming, at least one coat of full strength Mulseal Plus should be applied.

APPLICATION

Mulseal Plus may be applied using a brush, broom, squeegee, etc. For horizontal surfaces a squeegee or cheap, soft bristle broom is satisfactory, for vertical surfaces use a cheap turks head brush. Mulseal Plus is laid onto the surface continually in one direction, it should not be "brushed out". Brooms, brushes, etc. should be regularly washed during work and at any breaks as follows: Keep available a container filled with sufficient strong detergent/water solution to fully cover the broom or brush. Soak the brush in the solution and shake out before use. As work progresses, rinse the brush at frequent intervals to prevent it clogging, and again shake out before resuming. During any breaks in work the brushes should be left to soak in this detergent solution. Brushes should be inexpensive type - not paint brushes - and considered as expendable. On large jobs it is preferable to maintain several brushes in use.

Note: Mulseal Plus should not be applied in any closed area without adequate circulation of air.

RECOATING

Mulseal Plus should be recoated between 12 and 36 hours after previous coat to ensure satisfactory drying times. Shorter times may be acceptable in good drying weather, longer times allow potential surface contamination which could adversely affect intercoat adhesion. The surface of Mulseal Plus should be touch dry in about 4 - 6 hours in good conditions, but at this stage the film may still contain further water which should be allowed to evaporate prior to recoating.

REINFORCING

Mulseal Plus may be reinforced where required by the addition of a porous synthetic cloth (Sontara) embedded in the first full strength Mulseal Plus layer. Apply Mulseal Plus onto the surface, then lay the cloth into this and apply further Mulseal Plus, brushing well to ensure complete impregnation of the cloth.

FINISHING

Mulseal Plus should be protected from direct exposure to UV light by painting, sand blinding, sandwicking, etc. When painting use a bitumen-compatible emulsion paint applied after the Mulseal Plus is thoroughly dry - paints containing organic solvents are not suitable as the solvents may attack the bitumen content of Mulseal. Mulseal Plus may also be sand-blinded, by dusting the freshly applied Mulseal Plus topcoat with clean sharp sand passing a 3 mm mesh. Where directly exposed to the sun, paint films applied directly onto Mulseal Plus may crack, so it is advisable in those situations to sand-blind the topcoat of Mulseal Plus, allow this to thoroughly dry, then to paint with a suitable emulsion paint.

THINNING

Mulseal Plus is supplied ready for use and normally should not be thinned. If after thorough stirring the compound appears too thick for any specific use, it may be diluted with no more than 5% addition of water - do not use any organic solvents. Note that dilution of Mulseal Plus will also reduce thickness of the applied coatings.

Special note: Mulseal Plus must not be heated above 50°C, and should not be directly heated at any time.

Alternative application methods

Mulseal Plus may be applied by roller or spray systems, but particular care may be required in use. Contact Parchem Technical Services for details.

CLEANING

Splashes of Mulseal Plus on paintwork etc. should be wiped off immediately using a cloth dampened with a strong detergent solution. Brushes and brooms, etc. should be soaked in a strong detergent solution immediately application has finished, followed by hosing with a strong jet of water. Hands and skin may be cleaned using a proprietary "waterless" hand cleaner, but prevention of soiling is a better practice - and wear gloves and overalls. Where Mulseal Plus has been allowed to dry on equipment or surfaces it can only be removed using organic solvents such as Parchem Solvent, mineral turps or white spirits.

LIMITATIONS

Mulseal Plus is not recommended for continuous water immersion in service or as a membrane on internal walls subject to back pressure. Mulseal Plus is not suitable for use as a membrane for critical applications such as internal/bathroom wet areas.

ESTIMATING

SUPPLY

Mulseal Plus:	20 litre drum
Parchem Solvent:	4 and 20 litre cans

COVERAGE

Priming coat:	1.4 - 2.0 m ² / litre (1:1 with water)
Main coat:	1 - 1.4 m ² / litre (full strength)

A typical priming coat plus one full strength finish coat will give a film thickness of approximately 1 mm. Coverage will vary greatly dependent on surface texture and porosity, and method of application.

STORAGE

Mulseal Plus has a shelf life of 12 months if kept in a dry store below 30°C in original, unopened containers.

ADDITIONAL INFORMATION

Parchem provides a wide range of complementary products which include:

- concrete repair – cementitious and epoxy
- grouts and anchors – cementitious and epoxy
- waterproofing membranes – liquid applied, cementitious and bituminous sheet membranes
- waterstops – pvc and swellable
- joint sealants – building, civil and chemical resistant
- industrial flooring systems – cementitious and epoxy
- architectural coatings
- filler boards – swellable cork, bituminous and backing rod
- ancillary products

For further information on any of the above, please consult with your local Parchem sales office.

IMPORTANT NOTICE

A Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the MSDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

PRODUCT DISCLAIMER

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

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