

## MULTISEAL R151 POLYURETHANE SEALANT

### One Component Gun Grade Polyurethane Sealant

#### Specification

MULTISEAL R151 SEALANT is a one component polyurethane sealant.

#### Description

When applied, MULTISEAL R151 SEALANT cures to form a tough rubber-like seal. It exhibits not only excellent expansion and compression characteristics but also very good resistance to weather, stress movement, water and many chemicals. It is available in cartridge and sausage packaging.

#### Typical Applications

MULTISEAL R151 SEALANT requires no mixing and has excellent adhesion to both porous and non-porous substrates. It can be easily applied in both horizontal and vertical joints, is self curing and bonds to many materials, including concrete, masonry, aluminum and wood without the necessity to prime. It is also extensively used in:

- \* Expansion wall joints
- \* Curtain wall construction
- \* Panel walls
- \* Precast units
- \* Aluminum and wood window frames
- \* Sealing fascia, parapets and other structural components

#### Advantages

- \* Requires no mixing
- \* Produces a flexible long lasting joint
- \* Has extraordinary adhesion, cohesion and elasticity
- \* Easy to use in a wide range of weather conditions.
- \* Moisture cured
- \* Initial cure of 24 hours at 25° C
- \* In most cases, priming is not necessary
- \* Colours available

#### Direction for Use

##### Joint Preparation

- \* The number of joints and joint width should be designed for a maximum of  $\pm 25\%$  movement.
- \* In joints of 12mm, the sealant depth at midpoint should be 6mm. In joints of 12-25mm, the depth at midpoint should be 6-12mm.
- \* In deep joints, the sealant depth must be controlled by a closed cell backing rod. Where the joint depth does not permit the use of backing rod a bondbreaker (masking tape) must be used to prevent three point bonding.
- \* To maintain the recommended sealant depth, install backing rod by compressing and rolling it into the joint channel without stretching it lengthways.

Backing rod should be about 3-5mm larger in diameter than the width of the joint to allow for compression. Soft backing rod should be approximately 25% larger in diameter than the joint width. Backing rod becomes an integral part of the joint. The sealant does not adhere to it, and no separate bondbreaker is required. Do not prime or puncture the backing rod.

#### Surface Preparation

Surfaces must be structurally sound, dry, clean, free of dirt, moisture, loose particles, oil, grease, asphalt, tar, paint, wax, rust, water proofing, curing and parting compounds, and membrane materials.

#### Concrete, stone and other masonry

Clean by grinding, sandblasting or wire brushing to expose a sound surface free of contamination and laitance

#### Wood

New and weathered wood must be clean and sound. Scrape away paint to bare wood. For wood substrates with coatings or baked-on enamel or plastic finishes, consult MCC LIMPOPO information.

#### Metal

Remove scale, rust, and coatings from metal to expose a bright white surface. Remove protective coatings as well as any chemical residue or film. Aluminium window frames are frequently coated with a clear lacquer which must be removed before the application of MULTISEAL PU1 SEALANT. Remove any other protective coatings or finishes that could interfere with adhesion. When a protective coating has been specified on metal, consult MCC LIMPOPO's technical services before applying MULTISEAL PU1 SEALANT.

#### Priming

\* MULTISEAL PU1 SEALANT is generally considered a non-priming sealant, but special circumstances or substrates, e.g. protective coatings on aluminium may require a primer. It is the user's responsibility to check the adhesion of the cured sealant on typical test joints at the project site before and during application. Refer to technical data sheet on MULTI PRIME 1308 and consult MCC LIMPOPO'S for additional information.

\* Apply primer full strength, with a brush or clean cloth. A light, uniform coating is sufficient for most surfaces; porous surfaces require a somewhat heavier although not excessive coat.

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Allow primer to be track dry before applying MULTISEAL R151 SEALANT. Depending on temperature and humidity, primer will be track free in 15-120 minutes. Priming and sealing must be done on the same work day. Consult MCC LIMPOPO's technical services for additional information on primers for other surfaces

#### Coverage (Estimating Data)

Joint	6.4	9.5	12.7	15.9	19.1	22.3	25.4
Depth							
6.4	24.77	16.49	12.39	9.81			
9.5			6.59	5.47	4.66	4.10	
12.7				4.10	3.54	3.06	

#### Application

- \* MULTISEAL R151 SEALANT comes ready to use. Apply by professional caulking gun. Do not open sausages until preparatory work has been completed.
- \* Fill joints from the deepest point to the surface by holding a properly sized nozzle against the back of the joint.
- \* Tooling is recommended. Tooling results in the correct bead shape, a neat joint, and maximum adhesion.

#### Curing

The cure of MULTISEAL PU1 SEALANT varies with temperature and humidity. At 25° C, 50% relative humidity and a joint 13mm width by 7mm depth, assume the following times:

- \* Skins over overnight or within 24 hours
- \* Functional within 3 days
- \* Full cure in approximately 1 week

#### Cleaning

- \* Immediately after use, clean equipment with MULTI-THINNERS 1600. Use proper precautions when handling solvents.
- \* Remove cured sealant by cutting with a sharp-edged tool.
- \* Remove thin films by abrading.

#### Watchpoints

- \* Protect unopened containers from heat and direct sunlight
- \* In cool or cold weather, store container at room temperature for at least 24 hours before using.
- \* MULTISEAL R151 SEALANT should not be used for immersion in water.
- \* Refer to MULTISEAL 1142 Polyurethane Sealant two part system data sheet.
- \* Do not apply over freshly treated wood; treated wood must have weathered for at least 6 months.
- \* U.V. exposure may cause white or light colour to discolour.
- \* MULTISEAL PU1 SEALANT can be applied below freezing temperatures only if substrates are completely dry, free of moisture, and clean.
- \* Temperatures below 5° C will extend curing times.
- \* MULTISEAL R151 SEALANT should not come in contact with oil-base caulking, silicone sealant, polysulphides, fillers impregnated with oil, asphalt, or tar.

#### Packaging

- \* 600ml Propak sausage cartridges, 10 sausage per carton
- \* 310ml standard cartridges: 12 units per carton
- \* Shelf life is 1 year when stored in unopened containers at 25°C and 50% relative humidity.

#### Colour Availability

A complete line of standard colours is available including white, off-white, limestone, stone, redwood, tan and black.

#### Quality Assurance

MCC LIMPOPO's production and testing programmes comply with local and International testing standards.

#### Updates:

This data sheet supersedes all previous issues prior to this date: 01 /11/98.