

MasterSeal[®] SL 190

High performance, self-leveling, jet fuel & chemical resistant joint sealant for runways, pavements and industrial environment

DESCRIPTION

MasterSeal SL 190 is a high performance two-component specially engineered sealant based on hybrid polymer chemistry. It has excellent hydrolytic, jet fuel and UV resistant properties.

TYPICAL APPLICATIONS

- Airport runways & fueling zones
- Highway and bridges
- Driveways and loading docks
- Stadiums
- Chemical plants
- Oil & gas terminals, secondary containments zone
- Warehouse and garage

ADVANTAGES

- Excellent hydrolytic resistance properties
- Jet fuel resistant
- Cold-applied
- High resilience
- Chemical resistant
- Hydrocarbon resistant
- High durability
- Weather and UV resistant
- Suitable for concrete, asphalt & metal substrate

PACKAGING AND COLORS

MasterSeal SL 190 is supplied in a 5 L and 18 L kits and available in dark grey color.

STANDARDS

ASTM D 3137: Standard test method for hydrolytic stability.

BS EN 14188-2: Joint filler and sealant for cold applied sealant (BS EN 14187-5: Cold applied joint sealants - test method for the determination of the resistance to hydrolysis).

BS5212-1: Cold applied joint sealant systems for concrete pavements.

U.S. Federal Specification SS-S200E: Sealants, joint, two component, jet blast resistant, cold applied for portland cement concrete pavement.

ASTM C 920: Standard Specification for elastomeric joint sealants.

Conforms to ASTM C 920 Type M, Grade P, Class 25, Use T, NT and M.

BS EN ISO 9046: Determination of adhesion /cohesion properties of sealants at constant temperature.

BS EN ISO 9047: Determination of adhesion / cohesion properties of sealants at variable temperatures.

TYPICAL PROPERTIES*

Temperature of application	5°C to 48°C
Service temperature	-20°C to 65°C
Mixed density, ASTM D1475	1.59 g/cm ³
Flow, ASTM C639	Smooth, level
Tack free time, ASTM C679	<3 h
Pedestrian walking	12 to 16 h
Vehicle movement	24 h
Hardness, Durometer Shore A	26
Movement accommodation	25%
Solids	~100%
Penetration and recovery @ std condition, BS5212-1	>90%
Penetration and recovery after heat aging, BS 5212-1	>90%
Penetration and recovery after fuel immersion, BS 5212-1	>90%
Elongation at break, ASTM D412	>550%
Tensile strength, ASTM D412	>0.8 N/mm ²
Hydrolytic stability, ASTM D3137	Pass
Resistance to hydrolysis, BS EN 14188-2	Pass
Accelerated weathering resistance, ASTM C793	Pass
Artificial weathering, SS-S-200E	Pass
Resistance to fuel immersion, % mass change, SS-S-200E & BS5212-1	Pass
Change in volume on exposure to elevated temperature, SS-S-200-E	Pass
Adhesion-in-Peels, wet & dry, ASTM C920	Pass
Pull off strength, concrete	>1.8 N/mm ²
Pull off strength, metal	>1.1 N/mm ²
Pull off strength, asphalt	>1.5 N/mm ²
Adhesion and cohesion in tension and compression (cyclic movement), 14d & 28d heat aging, fuel immersion, BS5212-1	Pass

*Note: Values are measured at 23°C ± 2°C and 50% ± 10% relative humidity (R.H.).

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APPLICATION GUIDELINES

SURFACE PREPARATION

To ensure excellent adhesion joint profile must be free from any loosely adherent material which could prevent adequate bond to the substrate.

MasterSeal SL 190 should never be applied to damp or wet concrete or asphalt; or installed during inclement weather.

MIXING

Mix and use one complete unit at a time. Do not sub-divide.

Mix curing agent with base material for 5 - 10 minutes using a suitable paddle fitted to a 500rpm electric drill moving the paddle completely through the mass of the material.

The sides and base of the container should be periodically scraped down with a palette knife to ensure all the curing agent is completely blended with the base component.

Failure to mix correctly will result into bubbles, uncured sealant lumps.

Once mixed should be used immediately.

PLACING / APPLICATION

MasterSeal SL 190 must always be applied to surface primed with **MasterSeal P 190**.

MasterSeal SL 190 should be applied between 2 hours to 6 hours at 23°C of primer application. If joint is not sealed within that time, the joint must be reprimed. If the joint is not sealed or reprimed within 24 hours, the cured primer should be removed and joint reprimed. The mixed **MasterSeal SL 190** maybe poured directly from the tin or can be loaded into a gun for application. For detailed, recommended surface preparation and installation procedures, refer to **MasterSeal SL 190** method statement.

Note: For submerged conditions please consult your local technical service department.

COVERAGE

Width joint (mm)	Depth joint (mm)	Consumption ml/m
10	10	100
15	12-15	180-225
20	16-20	320-400
25	20-25	500-625
30	24-30	720-900
35	28-35	980-1225
40	32-40	1280-1600

Note: These are indicative / approximate consumption and may vary based on actual site conditions.

STORAGE AND SHELF LIFE

MasterSeal SL 190 has a shelf life of 12 months from production date when stored in its original packaging at temperatures between 5°C to 25°C in unopened condition and away from direct sunlight.

HEALTH AND SAFETY

Contact with the skin or eyes should be avoided, if ingested, DO NOT induce vomiting. Seek medical attention immediately. Refer to product SDS.

QUALITY AND CARE

All products originating from Master Builders Solutions Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

* Properties listed are based on laboratory controlled tests.

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STATEMENT OF RESPONSIBILITY

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