

PRODUCT DATA SHEET

SikaSeal[®]-490 SL

(formerly MasterSeal[®] SL 190)

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

DESCRIPTION

SikaSeal[®]-490 SL is a high performance, two-component specially engineered sealant, based on hybrid polymer chemistry. It has excellent hydrolytic, jet fuel and UV resistant properties.

USES

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

FEATURES

- 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 and metal substrate

CERTIFICATES AND TEST REPORTS

SikaSeal[®]-490 SL complies to:

- 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).
- BS 5212-1: 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 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.

PRODUCT INFORMATION

Packaging	5 L kit	18 L kit
Shelf life	SikaSeal [®] -490 SL has a shelf life of 12 months from the date of production, if it is stored in undamaged, original, sealed packaging, and if the storage conditions are met.	
Storage conditions	SikaSeal [®] -490 SL shall be stored in dry conditions, where it is protected from direct sunlight and at temperatures between +5°C and +25°C.	

Colour	Dark grey	
Density	1.59 g/cm ³ (mixed)	(ASTM D 1475)

TECHNICAL INFORMATION

Shore A hardness	~26		
Tensile strength	~0.8 N/mm ²	(ASTM D 412)	
Elongation at break	~550 %	(ASTM D 412)	
Movement capability	±25 %	(ASTM C 719)	
Tensile adhesion strength	Concrete ~1.8 N/mm ²	Metal ~1.1 N/mm ²	Asphalt ~1.5 N/mm ²
Chemical resistance	Resistance to fuel immersion (% mass change)	Pass	SS-S-200E BS 5212-1

APPLICATION INFORMATION

Consumption	Joint length [m] per 1 L	Joint width (mm)	Joint depth (mm)
	16	10	6
	8	15	8
	5	20	10
	3	25	12
	2	30	15
	1.6	35	17
	1.2	40	20

These are approx. consumption and may vary based on actual site conditions.

Ambient air temperature	+5°C to +45°C, min. 3°C above dew point temperature		
Substrate temperature	+5°C to +45°C, min.		
Tack free time	< 3 h	(ASTM C 679)	
Applied product ready for use	Pedestrian walking 12 - 16 h	Vehicle movement 24 h	

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTATION

- General Method Statement (GMS)

IMPORTANT CONSIDERATIONS

- Do not use in contact with drinking water or food.
- Sealant joint movement should not exceed ±25 % of the joint width when installed in a width to depth ratio of 2 : 1.
- SikaSeal®-490 SL is not chemical resistance to chlorinated solvents, aromatic solvent and diluted oxidizing acids.
- SikaSeal®-490 SL must be fully cured before permanent immersion in water.
- Paint compatibility with sealant should be checked prior to painting.
- Sika® Primer-190 should never be applied to damp, wet concrete and asphalt or installed during inclement weather.
- Sika® Primer-117 MS should never be applied to damp, wet concrete, cementitious screed and sand lime bricks.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

- All surfaces must be clean, dry and free from any loosely adhering particles.
- Check the joints edges for soundness and if found weak cut recess and fill up with suitable repair mortar.
- Correct joint depth can be established by inserting closed cell polyethylene backing rod tightly into the joint.
- When the joints have been filled with fiber filled board, this must be raked back to the required depth. Use bond breaker tape over the backer material.
- Protect surfaces with masking tape.

MIXING

- Mix and use one complete unit at a time. Do not split the units.
- Add comp. B into the comp. A pail. Mix the product thoroughly with a mixing paddle fitted to an electric hand drill, not exceeding 500 rpm, to avoid air entrapment.
- Mix for approximately 5 - 10 minutes until a smooth, even consistency is achieved.
- The sides and base of the container should be periodically scraped down to ensure all of the comp. B is completely blended with the comp. A.
- Failure to mix correctly will result in bubbles, uncured sealant and lumps.
- Once the product is mixed it should be used immediately.

APPLICATION

- SikaSeal®-490 SL must always be applied to surface primed with Sika® Primer-190 or Sika® Primer-117 MS.
- SikaSeal®-490 SL should be applied between 2 hours to 6 hours at 23°C of primer application.
- If joint is not sealed within recommended time, the joint must be re-primed.
- If the joint is not sealed or re-primed within 24 hours, the cured primer should be removed and joint primed again.

- The mixed SikaSeal®-490 SL 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 SikaSeal®-490 SL method statement.

CLEANING OF EQUIPMENT

- Application equipment should be cleaned immediately with Sika® Colma Cleaner, acetone or any suitable cleaning solvent after use.
- Hardened / cured material can only be mechanically removed

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.



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July 2024, Version 02.01

020515070000000095