BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET

SikaWall®-485 MS

Inorganic, potassium silicate-based mineral stain concentrate

PRODUCT DESCRIPTION

SikaWall®-485 MS is a traditional inorganic potassium silicate based mineral stain (lasure) concentrate that may be used alone or in combination with SikaWall®-485 MS Dilution to create translucent and opaque wall designs with an intensive mineral character. SikaWall®-485 MS adheres by creating a chemical bond with the mineral substrate offering a great durability. Ready-to-apply, for exterior and interior use.

WHERE TO USE

- SikaWall®-485 MS can be used to create designs both interior and exterior on vertical surfaces and ceilings. SikaWall®-485 MS can be used as a full finish over an entire building or a decorative design/mural on a single wall. Create all levels of colour from completely opaque to a hint of colour on façades. Transparency and colour depth depend on the chosen colour shade and the dilution ratio.
- Absorbent surfaces include, but are not limited to: concrete, brick, most stones, historic masonry, mortars, lime plasters, stucco, CMU, GFRC, cement boards and plasters.

CHARACTERISTICS / ADVANTAGES

- Helps to create translucent and opaque wall designs
- Extremely vapour-permeable – allows the system to breath
- Non-flammable - Does not release toxic gases or smoke in case of fire
- Resistant to weathering
- All components are UV stable
- Durable bonding to the substrate by silicification
- Resistant to fungal growth and algae
- Low VOC content

PRODUCT INFORMATION

Composition / Manufacturing	Organic Content: < 5 %
Packaging	15.14 L (4 US gal) (packaged in a 5 US gal pail)
Appearance / Colour	Liquid / White and other colours available. Refer to SikaWall® colour selection chart. Custom colour-matching available.
Shelf Life	12 months in its original, unopened pail
Storage Conditions	Store protected, in dry conditions, at temperatures between 5 °C to 30 °C. Do not expose to direct sunlight and heat. Close the opened packaging well. If there is paint left over, the remaining amount should be transferred into smaller containers to keep the air content as low as possible. Protect from

	freezing. If the product has frozen, do not use.
Density	1.28g / cm^3
pH-Value	~ 11
Volatile organic compound (VOC) content	White or tinted / 0,55 g/L
CSC MasterFormat®	▪ 09 97 23 Concrete and Masonry Coatings ▪ 09 93 13 Exterior Staining and Finishing ▪ 09 93 23 Interior Staining and Finishing
Resistance to Fire	**Surface burning characteristics** ASTM E84 / Class A: Flame Spread Index = 0 / Smoke Developed Index = 0 UL 723 / Class A: Flame Spread Index = 0 / Smoke Developed Index = 0
Resistance to Alkalinity	ASTM D1308 / Passes—no visible change at 24 hours
Resistance to UV Exposure	ASTM 4587 / UVB 500hs / Pass - No yellowing, cracking or delamination
Microbiological Resistance	ASTM D3273 / Passes—No fungal growth
Permeability to Water Vapour	ASTM E96 / 76 - 88 perm
Water Vapour Transmission	ASTM E96 / 27.5 g/h*m^2
Gloss Level	ASTM D523 / 0,45 Mineral Matte Flat
Chloride Ion Diffusion Resistance	Permeability Class: 536 Coulombs / Very Low
Light fastness of colour pigments	ASTM 4587 / UVB 500hs / Pass - No yellowing, cracking or delamination

APPLICATION INFORMATION

Mixing Ratio	Dilution ratios from 1:1 up to 1:20 (SikaWall®-485 MS with SikaWall®-485 MS-Dilution) are common.
Consumption	**Undiluted:** Approximately 37 m^2 to 58 m^2 (398 ft^2 to 625 ft^2) per 3.78 L (1 US gal) per coat of SikaWall®-485 MS. **Diluted:** With SikaWall®-485 MS Dilution (dilution rate of 1:1) Approximately 74 m^2 to 116 m^2 (796 ft^2 to 1250 ft^2) per 3.78 L (1 US gal) per coat of SikaWall®-485 MS with SikaWall®-485 MS Dilution. The consumption values given are for guidance and depend on the desired translucent effect, application method and substrate condition. Exact values may only be determined by an actual trial application on site. Refer to the relevant Product Data Sheet (PDS) for each SikaWall®-485 products for more consumption references.
Product Temperature	Minimum 5 °C / Maximum 30 °C
Ambient Air Temperature	Minimum 5 °C / Maximum 30 °C
Relative Air Humidity	Maximum relative humidity 80 %
Substrate Temperature	Minimum 5 °C / Maximum 30 °C
Pot Life	12 months in tightly closed container

Curing Time	The product will be dry to the touch within 1 to 3 hours. After application the surface must be protected from strong winds and sun until the product is dry (3-6 hours), it must also be protected from rain until the end of the cure which lasts between 12 at 36 hours depending on temperature and humidity.
Waiting Time / Overcoating	It is necessary to calculate a minimum of 24 hours between each coat.

SYSTEMS

System Structure	SikaWall®-485 MS can be applied in two or three layers mixed to the desired ratio with SikaWall®-485 MS Dilution. The combination of these products makes it possible to obtain the most varied translucent effects. For wider range of design options, SikaWall®-485 MS can also be use over SikaWall®-485 MP paint. Refer to the “Substrate Quality / Pre-treatment” section for the different product combinations.

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

LIMITATIONS

- SikaWall®-485 MS is not suitable for application on horizontal surfaces.
- SikaWall®-485 MS is not intended to seal dynamic cracks.
- Do not dilute SikaWall®-485 MS with water, only with SikaWall®-485 MS Dilution.
- SikaWall®-485 MS must not be applied at temperatures below 5 °C nor those in excess of 30 °C, or if it is raining, or if there is an immediate likelihood of rain.
- Do not apply SikaWall®-485 MS in direct sunlight, on overheated support and in strong winds.
- Provide appropriate protection for surfaces such as glass, natural stone, ceramics, etc. which are not to be coated. Any splashes of SikaWall®-485 MS on surrounding surfaces or traffic areas must be rinsed off immediately with plenty of water.
- Not compatible with resin-based coatings, plasto-elastomeric coatings, saponifiable old paints (as it may be the case for certain oil-based paints), and other non-wettable substrates (such as lacquers and varnishes)

ENVIRONMENT, HEALTH & 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

EQUIPMENT

SikaWall®-485 MP paint can be applied by:
- Brush: Use an Oval lasur brush
- Roller: Use 13 mm to 19 mm (½ in to ¾ in) nap synthetic roller cover
- Sprayer: Use an Airless Paint Sprayer

For spray applications, contact spray equipment specialists to determine suitable equipment and for application advice.

If the product is applied by airless sprayer, it is recommended to back roll the surface after application.

It is recommended to apply the basecoat with a brush, roller, to allow complete coverage on the surface.

SURFACE PREPARATION

The substrate must be sound, solid, dry, absorbent, clean, and free from dust, grease, oils, salts, moss, algae, and other substances that would impair adhesion. Old oil-based coatings, loose substrates, organically bound layers, and coatings should be removed. Damaged substrate should be repaired before painting with an appropriate Sika® repair material. Wait a minimum of 48 hours before applying the SikaWall®-485 MS on a repaired surface. Consult Sika Canada for recommendations.

Absorbing, unpainted surfaces can be coated first with SikaWall®-485 MS Dilution. For new concrete structures;

concrete should be at least 28 days old and any formwork oil, mold lubricating oil, shuttering oil, mold release oil, concrete form oil residues and curing compounds should be removed with SikaWall®-485 MP Detergent or by other methods.

New mortar or masonry surfaces may require treatment with SikaWall®-485 MP Lime Remover before staining if lime deposits or cement laitance are present. Surface contaminants must be completely removed by SikaWall®-485 MP Detergent or by other appropriate mechanical means.

MIXING

Mix SikaWall®-485 MS to ensure uniformity using a slow speed (300 - 450 rpm) drill fitted with a Jiffy-style paddle. Mix for about three (3) to five (5) minutes until a homogeneous mixture is obtained.

If it is planned to use SikaWall®-485 MS Dilution as a diluent with SikaWall®-485 MS, mix each product separately using a drill firstly. Then add SikaWall®-485 MS Dilution to SikaWall®-485 MS and stir all materials together. Mixing ratios from 1:1 up to 1:20 are common but higher dilution ratios are possible. Dilutions at any ratio are possible. Always have accurately measured materials.

Stirred regularly in its container before and during application to avoid segregation of constituents.

APPLICATION

For opaque result:
It is recommended to mix SikaWall®-485 MS with SikaWall®-485 MS Dilution at a ratio from 1:1 up to 1:4.

For transparent result:
It is recommended to mix SikaWall®-485 MS with SikaWall®-485 MS Dilution at a ratio from 1:5 up to 1:20. But higher dilution ratios are possible.

Usually, two (2) or three (3) coats of SikaWall®-485 MS mixed in the desired ratio with SikaWall®-485 MS Dilution will be necessary to obtain the desired result. It is important to work swiftly ''wet-on-wet'' and to always maintain a wet edge to a corner or architectural feature. It is important to keep stirring regularly in its container before and during application to avoid segregation of constituents. For spray applications, contact spray equipment specialists to determine suitable equipment and for application advice.

IMPORTANT NOTE : Always carry out an application test in an inconspicuous to verify substrate conditions and to confirm application method, consumption rate, coverage and satisfactory opacity and finish. Best practice suggests that the selected area is acceptable to all parties involved and that it is representative of the area to be eventually stained.

CLEAN UP

Clean all tools and application equipment with water immediately after use. Once dried/cured, material can only be removed mechanically.

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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: www.sika.ca

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