

## PRODUCT DATA SHEET

# Sika Thoroseal® Acryl 60

(formerly MEmaco A 660)

## WATER-BASED ACRYLIC BONDING AND MODIFYING ADMIXTURE

## **DESCRIPTION**

Sika Thoroseal® Acryl 60 is an acrylic-polymer emulsion that enhances the adhesion, physical properties, and durability of Portland cement mortars, plasters, stucco, and concrete mixes.

## **USES**

- Interior and exterior
- Above or below grade
- Horizontal, vertical, and overhead surfaces
- Improve adhesion and durability of cement-based mixes
- As gauging liquid for Sika waterproofing and repair products, such as Sika Thoroseal®-581

## Substrates

Concrete

## Industries/Sectors

- Commercial
- Residential
- Building Restoration
- Infrastructure

## **CHARACTERISTICS / ADVANTAGES**

- Acrylic polymer significantly improves adhesion, cohesion, tensile, compressive, and flexural strengths of cement-based materials
- Excellent chemical and UV resistance promotes longlasting repairs
- Improves freeze/thaw stability of Portland cementbased materials for durability in cold climates
- Retains stability when exposed to water for longterm performance of repairs

## **PRODUCT INFORMATION**

Chemical Base	Sika Thoroseal® Acryl 60 is an acrylic-polymer emulsion.		
Packaging	Sika Thoroseal® Acryl 60  1-gallon (3.8 L) bottles  5-gallon (18.9 L) pails  55-gallon (208 L) drums		
Shelf Life	1-gallon 5-gallon, 55-gallon drums: 12 months when properly stored.		
Storage Conditions	Transport and store in unopened containers between 40° and 100 °F (4° and 38 °C). Protect from freezing.		
Density	8.65 lbs/gal (1.04 kg/L)	(Lab Method)	
Solid Content by Weight	28% by Volume	(Lab Method)	

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Specific Advice	Maximum Water I 1 part Sika Thoros		parts H₂O	(Lab Method)
Indicative performance of mortar mix	Test Data The following properties are for sand/cement mortar samples:			
	Property	Results	Results	Test Methods
		With Water	With 1-to-1 Sika Thoroseal® Acryl 60	
	Compressive Strength, 28 days	3,800 (26.2) psi (MPa)	4,500 (31) psi (MPa)	ASTM C 109
	Tensile Strength, 28 days	225 (1.5) psi	350 (2.4) psi (MPa)	ASTM C 190
	Flexural Strength, 28 days	1,000 (6.9) psi (MPa)	1,800 (12.4) psi (MPa)	ASTM C 348
	Freeze/Thaw Durability	11 at 98 cycles	102 at 300 cycles	Method A

can be expected.

## APPLICATION INFORMATION

**Yield** 

Varies according to application. See Mixing Ratio table.

## **BASIS OF PRODUCT DATA**

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

## **LIMITATIONS**

#### For Best Performance

- Do not use Sika Thoroseal® Acryl 60 when the substrate or ambient temperature is below 40 °F (4 °C) or when the temperature is expected to fall below 40 °F (4 °C) within 24 hours. High relative humidity, excessive moisture, and low temperatures will retard the curing of mixes modified withSika Thoroseal® Acryl 60.
- Caution is required when using Sika Thoroseal® Acryl 60 in a mix that already has air entrained; consult Technical Service for its proper use.
- Do not overmix or aerate mixes.
- Use with proper ventilation.
- Do not use Sika Thoroseal® Acryl 60 as a surface-applied external bonding agent or as a primer.
- Do not subject cement-based mixes modified with Sika Thoroseal® Acryl 60 to water immersion for a minimum of 24 hours at 73 °F (23 °C).
- Not recommended for exposure to soft water or immersion where contact with water-treatment chemicals is present without a protective top coat.
- Caution should be used when a solvent-based material is being used over a base system that contains
   Sika Thoroseal® Acryl 60.
- For professional use only; not for sale to or use by the general public.
- Make certain the most current versions of product

data sheet and SDS are being used.

 Proper application is the responsibility of the user.
 Field visits by Sika personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the job site.

## **ECOLOGY, HEALTH AND SAFETY**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet (MSDS) containing physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

## SUBSTRATE PREPARATION

- 1. Follow surface preparation recommendations for repair material to be used.
- The area to be patched or coated should be in a saturated surface-dry (SSD) condition, with no standing water on surface.
- 3. For additional surface preparation guidelines, refer to the instructions for the Sika repair mortar or coating being used.

## **MIXING**

- 1. 1 part of Sika Thoroseal® Acryl 60 is typically mixed with 3 parts of potable water. Where increased physical and chemical resistance are required, increase the Sika Thoroseal® Acryl 60 water ratio to 1:2 or 1:1 (see Mixing Ratio table below).
- 2. Mechanically mix at low speed to avoid trapping air.



Do not overmix or mix at a high speed.

#### **Mixing Ratios**

Application	Ratios		
To improve the adhesion	Use 1-part Sika Thoroseal®		
properties of pointing	Acryl 60 to 3-parts water		
mortars and to reduce			
cracking in cement plaster			
For large overlays or top-	Use 2-parts Sika Thor-		
ping	oseal® Acryl 60 to 1-part		
	water		
For bonding cement	Use 1-part Sika Thoroseal®		
plaster no thicker than	Acryl 60 to 3-parts water		
1/4-3/8" (6-10 mm)			

Note: The above ratios are for normal conditions. Where bonding is more critical, increase the Sika Thoroseal® Acryl 60 content of the mixing liquid. A TEST PATCH IS ALWAYS RECOMMENDED.

#### **APPLICATION**

## Sand/Cement Mortar

- 1. Thoroughly mix all cement and sand first. The sand must be clean, free of clay, and dry.
- Makeup mixing liquid from a 1:3 or 1:2 Sika Thoroseal® Acryl 60/water mix, depending on requirements.
- Slowly add the mixing liquid to the cement/sand mixture and mix with a slow-speed mixer for 1-2 minutes to avoid trapping air.
- 4. After preparing, cleaning, and pre-dampening the surface, brush-apply a scrub coat (not diluted) of the Sika Thoroseal® Acryl 60-modified cement/sand. Scrub vigorously into the surface to displace any air pockets.
- 5. While the scrub coat is still wet or tacky, fill the repair area with the modified cement/sand mix, being careful not to over-trowel. The trowel should be cleaned frequently, kept wet, and used with minimal pressure.
- Maximum time for placement should not exceed 20 minutes. Higher air and surface temperatures or the use of fast-setting repair materials will decrease working and placement time.

## Curing

- When rapid drying is expected due to high temperatures, rapid air movement, or wind, it is recommended that the surface be covered with wet burlap to retain moisture.
- 2. For normal use, allow a 24-hour curing period.
- For heavy-wheeled traffic, allow a 4-day curing period.

## **CLEANING OF TOOLS**

Clean all tools and equipment immediately with wa-

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Product Data Sheet Sika Thoroseal® Acryl 60 October 2024, Version 02.01 0203010000000002032 ter. Cured material may be removed by mechanical means.

## **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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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