

PRODUCT DATA SHEET

Sikagard[®]-307 W

Single component, waterborne modified acrylic/polyurethane dispersion based coating with a gloss finish

PRODUCT DESCRIPTION

Sikagard[®]-307 W is a single component, water based polyurethane coating with designed hygiene functionality and chemical resistance. The anti-microbial is designed to remain locked in-film and active to ensure no growth of surface micro-organisms.

USES

Sikagard[®]-307 W may only be used by experienced professionals.

- Internal walls and ceilings of environments that require continuously sanitary conditions.
- Pharmaceutical
- Food & Beverage
- Bio-tech manufacturing
- Hospitals
- Clean rooms
- Laboratories

CHARACTERISTICS / ADVANTAGES

- Single component water based, low odor
- Hard finish and impact; scratch and abrasion resistant
- Gloss, easy clean finish
- Non-yellowing
- Fast development of physical strength
- Rapid drying, same day re-coat if necessary
- One coat finish (airless spray)
- Non-migrating integral film preservative

PRODUCT INFORMATION

Chemical Base	Waterborne acrylic/polyurethane copolymer dispersion	
Packaging	Single Component	5 gallon fill 5 gallon pail
Shelf Life	24 months (when stored under the recommended conditions)	
Storage Conditions	Store between 50–90 °F (10–32 °C)	
Solid content by weight	49%	
Solid content by volume	36 %	

TECHNICAL INFORMATION

Abrasion Resistance	113 mg weight loss	(ASTM D 4060, CS10 Wheel, 1000 g load)
Tensile Strength	Unreinforced - 2326 psi (16 N/mm ²)	(BS EN ISO 27-3)
Elongation at Break	Tensile Elongation: (BS EN ISO 527-3-Unreinforced) <u>24 hours</u> <u>maximum stress (tensile load at break)</u> =987psi (6.8 N/mm ²) elongation at break = 110% <u>48 hours</u> <u>maximum stress (tensile load at break)</u> =1045psi (7.2 N/mm ²) elongation at break = 87% <u>72 hours</u> <u>maximum stress (tensile load at break)</u> =1920 psi (13.2 N/mm ²) elongation at break = 50%	
Chemical Resistance	Standard 10 % solutions of acids and alkalis, including Nitric Acid AND Caustic Soda, failed to cause breakdown of the Sikagard®-307 W.	
Gloss Level	> 60 gloss units at 60 degree (Classified as "gloss" to BS EN 13300:2001)	
	Opacity: >99.5% (130 micron film) (Classified as "Class 1" to BS EN 13300:2001)	

APPLICATION INFORMATION

Coverage	400 sq.ft./gal., 4 mils WFT, recommended 2 coats
Cure Time	at 50 °F/60 % R.H.: Touch dry 45 mins, through cure 1 hour. at 68 °F/55 % R.H.: Touch dry 30 mins, through cure 45 mins. at 86 °F/50-60 % R.H.: Touch dry 15–20 mins, through cure 30–45 mins.

Application of Sikagard 307 W over Sikagard 307 W

Substrate Temperature	Minimum	Maximum
50 °F (10 °C)	4 hours	7 days
68 °F (20 °C)	1 hours	7 days
86 °F (30 °C)	1 hours	7 days

Application of Sikagard 307 W over Sikagard 203 W

Substrate Temperature	Minimum	Maximum
50 °F (10 °C)	24 hours	7 days
68 °F (20 °C)	4 hours	7 days
86 °F (30 °C)	4 hours	7 days

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

The substrate must be sound, clean, dry and free of all contaminants such as dirt, oil, laitance, mold, grease and surface treatments. Remove loose material mechanically, or high pressure washing. All surfaces to be coated should be clean and free from dampness. Prefill any static cracks with a proprietary flexible latex/acrylic caulk. Consult Sika Technical Service.

New Drywal

Minimum level 3-4 finish, prime with Sika Bonding Primer thinned 10 % with water. (Note: Sikagard®-307 W cannot be applied directly over Sika Bonding Primer. An intermediate coat of Sikagard 205 W is required at 6–8 mils.)

Painted Surfaces: Always ensure that the existing paint is fully adhered and sound. Abrade surface using 100 grit screen or paper. Epoxy paints, bitumen paints must be abraded using 100 grit and primed using Sika Bonding Primer, followed by a 6–8 mil coat of Sikagard®-307 W. All painted surfaces that are abraded require cleaning.

CMU Block, poured in place concrete: Spalled, flaking or damaged areas should be repaired using compatible materials. Sikagard®-307 W can be used as a primer when diluted with 25 % water. Sikagard®-307 W can be used as a block filler on new block. Like surfaces that requires a fill/ parge coat should use SikaQuick Smooth. Sikagard®-307 W can be applied directly to cured/sanded SikaQuick Smooth.

Cement screeds, plaster asbestos cement, lining boards

For absorbent substrates Sikagard®-307 W may be diluted with 25 % of clean water as a primer to kill suction. Dusty/friable substrates, seal with Sika Bonding Primer and an immediate coat of Sikagard 205 W to stabilize.

Concrete

Ensure new concrete is at least 10 days, preferably 28 days old, with moisture content of 20 % WME or less. Prime using Sikagard®-307 W diluted 25 % with water.

Wood

(Damp Free maximum 18% wood moisture equivalent)
Apply Sikagard®-307 W directly. If wood is prone to raised grain then prime with Sikagard®-307 W diluted with 25 % water, when dry, lightly sand and apply Sikagard®-307 W to correct film thickness.

Metals

Remove rust to bright metal. Apply Sikalastic Metal Primer WB or Sikalastic Metal Primer, use 2 coats on badly pitted or blast prepared surfaces. Non-ferrous metals can be wired brushed to remove oxidation products, prime as above. Degrease or use proprietary metal pretreatment fluid on galvanized if greasy.

Plastics/Insulation

Most plastics can be coated directly. Use Sika Bonding Primer on selfskinning or slab-stock polyurethane/polystyrene foams. Product is not suitable for open fibrous insulation. Dusty/friable substrates require sealing with Sika Bonding Primer and an immediate coat of Sikagard®-307 W to stabilize.

Overcoating Sikagard®-307 W

Clean off all contamination lightly abrade with 100 grit and apply Sikagard®-307 W directly.

MIXING

Pre-mix material using a drill and jiffy blade (300–450 rpm)

APPLICATION

Rollers

Product may be applied by short to medium 1/4–3/8 in. pile synthetic rollers. Two coats are recommended. Rollers are also used during reinforcement embedment.

Brushes

A wide soft nylon or bristle brush, Two coats are recommended, ideally product is applied with second coat at 90° to first.

Spray Equipment

Most types of industrial airless spray equipment e.g. GRACO ULTRA are suitable, pressure 3,000 p.s.i. tip size .11 to .15 and 60° fan angle. Although the product is designed with built in flow, the finer tip sizes provide the smoothest finish.

Tooling & Finishing

Note: All reinforcements using Flexitape and Reemat GFM must use Sikagard 203 W as the Finishing base coat.

CLEANING OF TOOLS

Clean brushes and spray equipment with water. Dried Sikagard®-307 W can be removed with paint stripper, cellulose thinners, xylene or toluene. Use personal protective equipment (chemical resistant gloves/goggles/clothing). Without direct contact, sweep up spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable local, state, and federal regulations.

LIMITATIONS

- Do not apply near foodstuffs in unventilated conditions. Always ensure adequate ventilation.
- Do not thin or brush out like conventional paints (thinning for primer use is permissible).
- Do not apply the products below a minimum temperature of 40 °F (4 °C) or a maximum of 90 °F (32 °C) throughout the application period. Conditions must remain a minimum of 40 °F (4 °C) and 5 °F (-15 °C) above the dew point.
- Protect from frost and heat (above 90 °F (32 °C)).
- Product is not suitable for open fibrous insulation.
- Sikagard®-307 W is normally intended to be used internally, however if used externally the natural weathering process of the material may cause slight darkening of the colors and progressive loss of gloss with time. All colors are intermixable.
- If there is any question as to whether or not the product will adhere to an existing coating or surface, a test patch should be applied and evaluated for compatibility and adhesion.
- Application by roller may result in a slight surface texture when using standard coverage rates. If a smoother finish is required apply 3 thinner coats to achieve desired DFT.
- Previous coat must be completely dry prior to overcoating.
- Ensure entire surface is fully dried before proceeding. Cracking may occur when overcoating undried surfaces or when material is applied in a heavy application.
- Good ventilation is required for Sikagard®-307 W to dry properly.
- Gloss is effected by humidity and temperature.
- The incorrect assessment and treatment of cracks may lead to a reduced service life and reflective cracking.
- If additional heating is required, do not use gas, oil, paraffin or other fossil fuel heaters; these methods produce large quantities of carbon dioxide and water vapor, which may adversely affect the finish. Use only electric powered warm air blower systems.
- New concrete should be allowed to cure/hydrate for a minimum of 10 days and preferably 28 days.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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Sika Corporation

201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

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