

# PRODUCT DATA SHEET

# Sikagard®-140 Pool

## ACRYLIC WATERBORNE COATING FOR SWIMMING POOL LINING

## **DESCRIPTION**

Sikagard®-140 Pool is a 1-part, water-based, coloured, acrylic resin coating with good resistance to chlorine treated water.

## **USES**

The Product is used as a:

- Protective coating for interior and exterior concrete pools
- Protective coating for interior and exterior chlorinated swimming pools using automatically controlled water treatment equipment

The Product is used on the following substrates:

- Concrete
- Sikagard®-720 EpoCem®
- Sikafloor®-81 EpoCem®
- Sika® Icoment®-520
- Water resistant fibre cement panels (not permanently immersed in water)
- Chlorinated rubber coatings
- Sikagard®-140 Pool

## **CHARACTERISTICS / ADVANTAGES**

- 1-part ready to use
- Can be applied onto various types of substrates
- Easy to refurbish, can be overcoated directly with itself
- Good yellowing resistance
- Good chalking resistance
- Good resistance to fatty acids from lotions and cosmetics
- Good resistance to chlorinated water and common swimming pool cleaning chemicals
- Good opacity (covering power)

## **APPROVALS / STANDARDS**

 CE marking and declaration of performance based on EN 1504-2:2004 Products and systems for the protection and repair of concrete structures — Surface protection systems for concrete — Coating

## PRODUCT INFORMATION

Chemical base	Acrylic resin, water based		
Packaging	5 L container Refer to the current price list for available packaging variations.		
Shelf life	12 months from date of production		
Storage conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +25 °C. Always refer to packaging.  Refer to the current Safety Data Sheet for information on safe handling and storage.		
Appearance / Colour	Cured colour	Available in various colours	
Density	1.34 kg/l	(EN ISO 2811-1)	

## **Product Data Sheet**

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Solid content by weight	63.5 %		
Solid content by volume	50.9 %		
TECHNICAL INFORMATION			
CHEMICAL RESISTANCE	Resistant to acidic and alkaline detergents, disinfectants and chlorinated water in swimming pools with controlled water treatment equipment.  Not suitable for use if water treatment is by ozone or electrolysis.  Not resistant to organic solvents.		

precoat filters.

In case of higher chlorine concentration the coating may tend to chalking and discoloration. Refer to DIN 19643-2 Treatment of water of swimming pools and baths - Part 2: Combinations of process with fixed bed filters and

## **APPLICATION INFORMATION**

Consumption	160 g/m² per layer, minimum 2 layers to be applied			
Layer Thickness	120 μm wet film thickness per layer			
Product Temperature	Maximum	+30 °C	+30 °C	
	Minimum	+8 °C	+8 °C	
Ambient Air Temperature	Maximum	+30 °C	+30 °C	
	Minimum	+8 °C	+8 °C	
Relative Air Humidity	Maximum 80 %		% r.h.	
Dew Point	Beware of condensation. The substrate and uncured applied product must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the surface of the applied product. Low temperatures and high humidity conditions increase the probability of blooming.			
Substrate Temperature	Maximum	+30 °C	+30 °C	
·	Minimum	+8 °C	+8 °C	
Substrate Moisture Content	Substrate	Test method	Moisture content	
	Cementitious substrates	Calcium carbide meth- od (CM-method)	≤ 4 % 	
	No rising moisture (ASTM D4263, polyethylene sheet)			
Waiting Time / Overcoating	Temperature	Minimum	Maximum	
	+20 °C	~40 hours	~4 days	
	+10 °C	~16 hours	~3 days	
	Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.			
Applied Product Ready for Use	Before filling the pool leave Sikagard®-140 Pool to cure for at least 14 days after the final application. The temperature must not be below +10 °C during the curing process.  Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.			



## **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.

## **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**

#### IMPORTANT

## Strictly follow installation procedures

Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

#### **EQUIPMENT**

### APPLICATION EQUIPMENT

- Brush
- Fleece roller
- Airless spray equipment

For airless spray application use the following settings:

Pressure	180 bar
Nozzle bore	0.38-0.66 mm
Spray angle	40–60 °

## SUBSTRATE QUALITY

Existing coatings must be tested to confirm their adhesion to the substrate and their compatibility. As guidance, adhesion test average  $\geq 0.8 \text{ N/mm}^2$  with no single value below 0.5 N/mm<sup>2</sup>.

## SUBSTRATE PREPARATION

#### **IMPORTANT**

#### **Exposing blow holes and voids**

When mechanically preparing the surface, make sure to fully expose blow holes and voids.

**EXPOSED CONCRETE OR CEMENTITIOUS RENDER** 

- 1. Remove weak cementitious substrates.
- Prepare cementitious substrates mechanically using abrasive blast cleaning or planing / scarifying equipment to remove cement laitance.
- 3. Before applying thin layer resins, remove high spots by grinding.
- 4. Use industrial vacuuming equipment to remove all dust, loose and friable material from the application surface before applying the Product.
- Use Sikagard®-720 EpoCem®, Sikafloor®-81 EpoCem® or Sika® Icoment®-520 to level the surface or fill cracks, blow holes and voids.

Contact Sika® Technical Services for additional information on products for levelling and repairing defects.

#### COATED SUBSTRATE WITH INADEQUATE ADHESION

- 1. Remove existing coatings using suitable removal equipment such as abrasive blast cleaning or high pressure water jetting.
- Prepare cementitious substrates mechanically using abrasive blast cleaning or planing / scarifying equipment to remove cement laitance.
- 3. Before applying thin layer resins, remove high spots by grinding.
- 4. Use industrial vacuuming equipment to remove all dust, loose and friable material from the application surface before applying the Product.
- 5. Use Sikagard®-720 EpoCem®, Sikafloor®-81 EpoCem® or Sika® Icoment®-520 to level the surface or fill cracks, blow holes and voids.

#### COATED SUBSTRATE WITH ADEQUATE ADHESION

- 1. Thoroughly clean the surface of all contaminants using pressured water cleaning equipment.
- 2. Lightly abrade or grind the surface with mechanical grinding or abrading equipment to achieve a sheen free surface.
- Use industrial vacuuming equipment to remove all dust, loose and friable material from the application surface before applying the Product.

### **APPLICATION**

#### **IMPORTANT**

#### Ventilation in confined spaces

Always ensure good ventilation when applying the Product in a confined space.

#### **Exposure to direct sunlight**

Note: When the product is exposed to direct sunlight, there may be some discolouration and colour variation. This has no influence on the function and performance of the coating.

#### SPRAY APPLICATION

- Spray apply the Product in a continuous operation and at a speed to achieve a consistent thickness and surface finish
- Control the layer thickness during application using a thickness gauge.
  - The coating must be continuous, pore free and to the required surface finish.
- 3. Protect Product from rain, condensation and water for at least 24 hours at +20 °C and at least 48 hours at +10 °C.
- 4. Apply additional coats as required.

#### MANUAL APPLICATION

- 1. Apply the Product evenly over the surface with a short pile fleece roller at the required consumption.
- 2. Control the layer thickness during application using a thickness gauge.
- 3. To achieve a smooth finish, smooth the surface with a brush.
  - The coating must be continuous, pore free and to the required surface finish.
- Protect Product from rain, condensation and water for at least 24 hours at +20 °C and at least 48 hours at +10 °C.
- 5. Apply additional coats as required.



#### **CLEANING OF TOOLS**

Clean all tools and application equipment with water immediately after use. Hardened material can only be removed mechanically.

## **LOCAL RESTRICTIONS**

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

## **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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