

# Sikagard<sup>®</sup>-62

## Solvent free epoxy coating

Construction

<b>Description</b>	Sikagard-62 is a two component high build thixotropic protective coating based on epoxy resin. When cured Sikagard-62 provides a hard, glossy film with high resistance to abrasion and chemical attack.
<b>Uses</b>	Sikagard-62 is successfully used for concrete and steel protection in the following applications: waterproof internal reservoir coatings, interior or exterior (when not subject to UV irradiation) protective coating for silos, pipes, tunnels and galleries. Also in laundries, factories, chemical process areas, sewage treatment works, dairies etc as an impervious chemical resistant coating for floors and walls. Sikagard-62 is vapour proof. When Sikadur Silica Aggregate is applied to the final coat of Sikagard-62 an extremely hard wearing anti-skid, waterproof, chemical resistant finish is obtained.
<b>Advantages</b>	<ul style="list-style-type: none"> <li>▪ Protective and decorative.</li> <li>▪ Excellent chemical resistance.</li> <li>▪ Easy for cleaning and graffiti removal.</li> <li>▪ High abrasion resistance.</li> <li>▪ Excellent adhesion to most building materials.</li> <li>▪ Approved for use with potable water.</li> </ul>
<b>Storage and Shelf Life</b>	Stored in the original sealed containers within the temperature range of +5°C to +35°C, this product will keep for a minimum of three (3) years.
<b>Instructions for Use</b>	
<b>Surface Preparation</b>	<p>The substrate must be sound, dry, free from dust and any surface contaminants (e.g. oil, grease, fats, chemicals, rust, paint, form release and curing membrane residues, etc.) Blow holes or irregularities should be filled and the substrate levelled with appropriate Sikafloor or Sikadur mortars prior to application of Sikagard-62. This is essential in all areas of contained liquids or water. On steel structures light abrasion of the substrate is recommended.</p> <p>Pre-seal the surface of porous and/or damp substrates with Sikagard-720 EpoCem. This is a very fine fairing mortar formulated on a hybrid epoxy resin/cementitious base. Sikagard-720 should be applied in conditions of falling substrate temperature to avoid the formation of pin holes, blow holes or drumminess caused by expanding air in the porous substrate.</p> <p>Cementitious materials other than EpoCem should be at least 3 or 4 weeks old and should be prepared by mechanically wire-brushing, acid etching, scarifying, abrasive blasting or high pressure water blasting.</p>
<b>Mixing</b>	Sikagard-62 is supplied in preweighed containers. Mix all of Part B with all of Part A and the pigment pack in the large container using a low speed drill and windmill stirrer (max. 600 rpm). Mix until no streaks of colour are visible (about 3 to 5 minutes). Mix so as not to entrap too much air in the product. Use immediately. Application is made easier if materials are stored at between 15°C to 23°C for 24 hours prior to mixing.
<b>Application</b>	Sikagard-62 is may be applied by brush, roller or airless spray. Apply at least the first coat to porous substrates when the substrate temperature is falling. Ideally, start the coating application at sunset. The air in the substrate pores will be contracting then and will physically suck the coating into the pores and cracks enhancing the penetration and sealing function of the coating. Apply a minimum of two coats (three coats for chemical and high mechanical resistance). Ideally, use differing colours on each coat to enable easier application and site control. Recoating should occur when the previous coat can still be clearly pressed in with a fingernail. If recoating cannot be carried out within 48 hours, roughen surface with glass paper, wipe with Sika Colma Cleaner and recoat without delay.

<b>Cleaning</b>	Uncured material may be cleaned from application tools, etc. by using Sika Colma Cleaner (flammable solvent). Cured material can only be removed mechanically.
-----------------	--

### Technical and Physical Data

<b>Form</b>	Liquid thixotropic epoxy resin			
<b>Density</b>	1.35 kg / litre			
<b>Consumption/Coverage</b>	0.25 - 0.4 kg / m <sup>2</sup> per coat depending on method of application, temperature, and surface texture, at the recommended film thickness per coat. Normally 2 - 3 coats.			
<b>Potlife (12 kg mix)</b>	30 minutes approx. @ 20°C - at higher temperatures potlife is reduced. - at lower temperatures potlife is extended.  Refer 'Important Notes'			
<b>Maximum relative humidity during cure</b>	85%			
<b>Application temperature</b>	Minimum 5°C, Maximum 30°C			
<b>Maximum intercoat period</b>	48 hours @ 20°C			
<b>Maximum thickness per coat</b>	150 - 200 microns			
<b>Coefficient of thermal expansion (-10°C to +40°C)</b>	7.5 x 10 <sup>-5</sup> mm/m/°C approx.			
<b>Temperature resistance (without chemical or mechanical action)</b>	Permanent Maximum: dry 70°C wet 60°C			
<b>Approximate cure times</b>		30°C	20°C	10°C
	Repaintable after	5 hours	10 hours	18 hours
	Walkable after	8 hours	17 hours	24 hours
	Full chemical resistant cure	9 days	12 days	15 days
	<b>Note: Sikagard-62 reaches 90% of its full cure at 20°C in 4 days.</b>			
<b>Mechanical strengths (At 7 days)</b>	Tensile strength	25MPa approx.		
	Elongation at break	10% approx.		
	Compressive strength	50MPa approx.		
	Flexural tensile strength	50MPa approx.		
	E-Modulus (dynamic)	30-40.10 <sup>2</sup> MPa approx.		
<b>Adhesive strength (DIN 53232)</b>	To dry concrete approx.	3.5 MPa *		
	To sandblasted steel approx.	25 MPa		
	To aluminium approx.	16 MPa		
	* failure in concrete			
<b>Colour</b>	Standard colours as per Sikafloor colour chart			
<b>Packaging</b>	Pre-proportioned 2 part kit:	Part A:	8.4 kg	
		Part B:	3.0 kg	
		Pigment Pack	600 g	

# Construction



**Suitability for use in drinking water**Complies with the requirements of AS 4020: 2005 (Int) – 1994 at a maximum allowable surface area to volume ration of 3365 mm<sup>2</sup> /litre of water**Chemical resistance**

(3 coats on sheet steel - 500 microns approximately).

Test Medium	Test Temp °C	Exposure Period and Performance Rating					
		1 day	7 days	30 days	2 mths	6 mths	12 mths
Acetic acid 20%	20	A	A	A	A	AD	C
	40	A	A	A	AD	C	-
Ethyl Acetate	20	A	B	C	-	-	-
Acetone	20	A	C	-	-	-	-
Ammonia 10%	20	A	A	A	A	A	A
Ammonia 10%	40	A	A	A	A	A	AD
Caustic Soda 30%	20	A	A	A	A	A	A
Cement water	20	A	A	A	A	A	AD
	40	A	A	A	A	A	BD
Citric Acid 20%	20	A	A	A	A	AD	AD
	40	A	A	AD	AD	AD	AD
Detergents (eg. liquid "Ajax")	20	A	A	A	A	A	A
	40	A	A	A	A	AD	AD
Distilled water	20	A	A	A	A	A	A
	40	A	A	A	A	A	AD
	60	A	A	A	BD	BD	BD
Ethanol	20	A	A	A	B	C	-
	40	A	B	C	-	-	-
Ethanol/Water 60:40	20	A	A	A	A	A	A
Formic acid 10%	20	A	A	A	A	A	B
Fuel oil (EMPA)	20	A	A	A	A	A	A
	40	A	A	A	A	A	A
	60	A	A	A	A	A	A
Hydraulic fluids (eg. "Arcosafe", "Skydrol")	20	A	A	A	A	A	A
	40	A	A	A	A	B	C
Hydrochloric acid, 10%	20	A	A	A	A	A	A
Hydrochloric acid, concentrated	20	A	AD	AD	AD	AD	AD
	40	AD	AD	AD	BD	C	-
Hydrogen peroxide 5%	20	A	A	A	A	B	B
Iron (III) chloride sol. 35%	20	A	A	AD	AD	AD	AD
	40	A	A	AD	AD	AD	AD
Iron (II) sulphate sol. 35%	20	A	AD	AD	AD	AD	AD
	40	A	AD	AD	AD	AD	AD
Sodium Hypochlorite 14% Cl	20	A	A	AD	BD	BD	C
Kerosene	20	A	A	A	A	A	A
	40	A	A	A	A	A	A
Lactic acid 20%	20	A	A	A	AD	BD	C
	40	A	A	AD	C	-	-

**Chemical resistance**

(3 coats on sheet steel - 500 microns approximately).

Test Medium	Test Temp °C	Exposure Period and Performance Rating					
		1 day	7 days	30 days	2 mths	6 mths	12 mths
Liquid manure	20	A	A	A	A	A	AD
	40	A	A	A	AD	AD	AD
Liquid silage	20	A	A	A	AD	AD	AD
	40	A	A	AD	BD	BD	BD
Methyl ethyl ketone MEK	20	A	C	-	-	-	-
Nitric acid 20%	20	AD	AD	AD	C	-	-
	40	AD	AD	C	-	-	-
Oxalic acid 10%	20	A	A	AD	AD	BD	C
	40	A	AD	AD	C	-	-
Phosphoric acid 40%	20	A	AD	AD	BD	BD	C
	40	AD	AD	BD	C	-	-
Potassium permanganate 10%	20	A	A	B	C	-	-
Red wine	20	A	A	A	A	A	A
Sodium Carbonate Solution (saturated)	20	A	A	A	A	A	A
	40	A	A	A	A	A	A
Sodium Chloride solution (saturated)	20	A	A	A	A	A	A
	40	A	A	A	A	A	A
Sodium sulphite solution (saturated)	20	A	A	A	A	A	A
	40	A	A	A	A	A	A
Styrene	20	A	A	A	A	A	B
Sulphuric acid 50%	20	AD	AD	AD	AD	AD	AD
	40	AD	AD	AD	AD	AD	AD
Sulphurous acid 5%	20	A	A	AD	AD	AD	BD
	40	A	AD	AD	AD	AD	BD
Tartaric acid 20%	20	A	A	A	A	A	A
Toluene	20	A	A	B	B	B	B
	40	A	A	B	B	B	C
Trichloroethylene	20	A	B	C	-	-	-
Water	20	A	A	A	A	A	A
	40	A	A	A	A	A	A
	60	A	A	A	B	B	B
White wine	20	A	A	A	A	A	A

For information about resistance to other media, please consult our Technical Department.

A = resistant to prolonged contact

B = temporarily resistant

C = breakdown of coating

D = discolouration of coating

### Important Notes

- Do not dilute the product as this will affect in-service performance. Thinners or solvents must not be used.
- For application in damp conditions please consult our Technical Department for further information.
- Do not part mix containers.
- Do not mix and apply product that has a temperature of greater than 30°C. If applying at higher than 30°C, as soon as the Sikagard-62 is mixed transfer the container into an esky containing ice to just below the rim of the container, and then apply the Sikagard-62 from the open container in the esky.
- The temperature at which the Sikagard-62 is stored during the 24 hours before it is mixed will govern its potlife when mixed.
- If the temperature of a porous substrate (which includes the vast majority of concrete) is rising i.e. is in direct sunlight prior to late afternoon, the air in the pores and cracks is expanding and if a wet coating is placed over such a substrate the expanding air will blow bubbles in the coating and prevent the liquid coating penetrating the substrate pores and cracks etc. Prior to the coating reaching the gel phase the bubbles will burst and leave "pin holes" in the coating, whereas when in the gel phase bubbles will be "frozen" into the cured coating. These bubbles will be a weak point in the coating as their wall thickness will be less than the applied film thickness on the substrate.
- To avoid unsightly water spotting do not apply Sikagard-62 when ambient temperature will reach "dew point" before the coating has cured.
- Similarly do not allow water to contact Sikagard-62 that is not seven (7) days old @ 20°C or older at lower temperatures since it will mark the coating.
- Do not apply Sikagard-62 to cementitious mortars that are modified with acrylic, acrylic co-polymer, EVA or PVA polymers (eg. SikaTops or Sika MonoTops) because under certain environmental conditions hardened mortar or render may swell slightly and crack the rigid epoxy coating.
- Light colours will yellow with exposure to sunlight or UV radiation
- Please consult our Technical Department for further information.

### Handling Precautions

- Avoid contact with the skin, eyes and avoid breathing its vapour.
- Wear protective gloves when mixing or using.
- If poisoning occurs, contact a doctor or Poisons Information Centre.
- If swallowed, do NOT induce vomiting. Give a glass of water.
- If skin contact occurs, remove contaminated clothing and wash skin thoroughly.
- If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

### Important Notification

The information, and, in particular, the recommendations relating to the application and end-use of Sika's 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 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 proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

