BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET

Sikafloor®-156 CA

Epoxy Primer and Binder

PRODUCT DESCRIPTION

Sikafloor®-156 CA is a two-component, solvent-free, low-viscosity, high-strength, epoxy resin, used as an epoxy primer and binder for Sikafloor® Systems.

WHERE TO USE

Sikafloor®-156 CA may only be used by experienced professionals.

- Primer and adhesion promoter for Sikafloor® epoxy and polyurethane floors
- Binder for epoxy mortar screeds
- Bonding Sika® mortars to various substrates

CHARACTERISTICS / ADVANTAGES

- Low viscosity ensures excellent penetration and adhesion
- High mechanical resistance
- User friendly mix ratio = 3:1 (parts by volume)
- Low VOC content, neutral odour

ENVIRONMENTAL INFORMATION

- Conformity with LEED®v4 MR Credit (Option 1): Building Product Disclosure and Optimization – Environmental Product Declarations.
- Conformity with LEED®v4 EQ Credit: Low-Emitting Materials
- Conformity with LEED®v4 MR Credit (Option 2): Building Product Disclosure and Optimization - Material Ingredients
- Conformity with LEED®v4 MR Credit (Option 2): Building Product Disclosure and Optimization - Sourcing of Raw Materials

APPROVALS / CERTIFICATES

- Meets the requirements of CFIA and USDA for use in food plants.

PRODUCT INFORMATION

CSC MasterFormat®	**09 67 23 | RESINOUS FLOORING**
Packaging	Component A: 22.5 L (5.94 US gal) Component B: 7.5 L (1.98 US gal) Components A+B: 30 L (7.9 US gal) unit
Shelf Life	2 years in original unopened packaging.
Storage Conditions	Store dry between 5 °C to 32 °C (41 °F to 89 °F). Condition product at temperatures between 18 °C to 30 °C (65 °F to 86 °F) before using.

Appearance / Colour	Clear amber
Viscosity	A+B: ~260 cps (mixed)
Volatile organic compound (VOC) content	~23.5 g/L

TECHNICAL INFORMATION

Shore D Hardness	~83	(ASTM D2240)
Abrasion Resistance	~0.15 g (~0.0053 oz) CS17/1000 cycles/1000 g (2.2 lb)	(ASTM D4060)
Resistance to Impact	~3.39 joules (~2.5 ft.lb)	(ASTM D2794)
Indentation	~7.14 %	(MIL-PRF-24613)
Compressive Strength	~41 MPa (~5946 psi)	(ASTM D695)
Tensile Strength	~36 MPa (~5221 psi)	(ASTM D638)
Elongation at Break	~10.3 %	(ASTM D638)
Pull-Off Strength	> 2.5 MPa (> 363 psi) (substrate failure)	(ASTM D7234)
Service Temperature	Minimum: 0 °C (32 °F) Maximum: 50 °C (122 °F)	
Temperature Resistance	**Thermal Compatibility:** Passes	(ASTM C884)
	Coefficient of Thermal Expansion: ~1.27 x 10^{-4} mm/mm/°C (~0.70 x 10^{-4} in/in/°F)	(ASTM D696)
	Heat Deflection Temperature: ~37 °C (~98.6 °F)	(ASTM D648)
	Flammability: ~55 mm (~2.17 in)	(ASTM D635)
Water Absorption	~0.3 %	(ASTM C413)
Chemical Resistance	Consult Sika Canada	
Mixing Ratio	A:B = 3:1 by volume	
Consumption	4 m^2/L (160 ft^2/US gal.) (10 mil w.f.t.) (Optional: thicken with Sikafloor® Extender T or Quartz flour)	
Product Temperature	Condition product at temperatures between 18 °C to 30 °C (65 °F to 86 °F) before using.	
Ambient Air Temperature	Minimum: 10 °C (50 °F) Maximum: 30 °C (86 °F). Mixing and application attempted at material, ambient and/or substrate temperature conditions less than 18 °C (65 °F) will result in a decrease in product workability and slower cure rates.	
Relative Air Humidity	Maxiumum 85 % (during application and curing).	
Dew Point	Substrate must be at least 3 °C (5 °F) above the Dew Point to reduce the risk of condensation, which may lead to adhesion failure or "blushing" on the floor finish.	
Substrate Moisture Content	Moisture content of concrete substrate must be ≤ 4 % (pbw – part by weight) as measured with a Tramex® CME/CMExpert type concrete moisture meter.	

Pot Life

250 g (8.8 oz)	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)
Open time in pot	-	~40 (minutes)	-
Open time on substrate	~70 (minutes)	~45 (minutes)	~40 (minutes)

Curing Time

	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)
Foot traffic	~24 (hours)	~12 (hours)	~6 (hours)
Light traffic	~5 (days)	~3 (days)	~2 (days)

Protect from dampness, condensation and water contact during the initial 24 hour cure period.

Waiting Time / Overcoating

	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)
Minimum	~24 hours	~8 hours	~5 hours
Maximum	~96 hours	~48 hours	~24 hours

Applied Product Ready for Use

	10 °C (50 °F)	20 °C (68 °F)	30 °C (86 °F)
Full Cure / Chemical Exposure	~10 days	~7 days	~5 days

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.
Properties tested at 23 °C (73 °F) and 50 % R.H. unless stated otherwise.

LIMITATIONS

- Sikafloor®-156 CA is best installed by skilled and experienced applicators. Consult Sika Canada for advice and recommendations.
- Prior to application, measure and confirm the following: substrate moisture content, ambient relative humidity ambient and surface temperature and dew point. During installation, confirm and record above values at least once every three (3) hours, or more frequently whenever conditions change (e.g. ambient temperature rise/fall, relative humidity increase/decrease, etc.).
- Moisture content of concrete substrate must be ≤ 4 % (pbw – part by weight) as measured with a Tramex® CME/CMExpert type concrete moisture meter on mechanically-prepared surface according to this product data sheet (preparation to ICRI / CSP 3 - 9). Do not apply to concrete substrate with moisture levels exceeding 4 % (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter. If moisture content of concrete substrate exceeds 4 % (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter, use Sikafloor®-1610 or Sikafloor®-81 EpoCem®CA on horizontal surfaces and Sikagard®-75 EpoCem®CA on walls and overhead applications.
- When relative humidity tests for concrete substrate are conducted per ASTM F2170 for project specific requirements, values must be ≤ 85 %. If values exceed 85 % according to ASTM F2170 use Sikafloor®-1610 or Sikafloor®-81 EpoCem®CA.
- ASTM F2170 testing is not a substitute for measuring substrate moisture content with a Tramex® CME/CMExpert type concrete moisture meter as described above.
- Do not apply while ambient and substrate temperatures are rising, as pinholes may occur. Ensure there is no vapour drive at the time of application. Refer to ASTM D4263, may be used for a visual indication of vapour drive.
- Freshly applied material should be protected from dampness, condensation and water for at least 72 hours.
- Do not apply Sikafloor® to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikafloor® product after application. If concrete substrate has or is suspected to have ASR (Alkali Silica Reaction) present, do not proceed. Consult with design professional prior to use.
- Any aggregate used with Sikafloor® systems must be non-reactive and oven-dried.
- This product is not designed for negative side waterproofing.
- Do not apply to substrates exposed to extreme thermal shock.
- Typically not recommended for exterior slabs on grade where freeze/thaw conditions may exist.
- Direct fired gas or kerosene heaters produce byproducts that can have adverse effects on the curing resin. To avoid this occurrence, heaters must be exhausted to exteriour of the building to avoid defects such as amine blush, whitening, loss of adhesion or other surface deficiencies.

- Mechanical, chemical and physical properties will be fully achieved at full cure.
- Beware of air flow and changes in air flow. Introduction of dust, debris, and particles, etc. may result in surface imperfections and other defects.
- Surface may discolour in areas exposed to constant ultra violet light.

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.

SURFACE PREPARATION

Surface Preparation
The concrete surface must be clean and sound. Remove any dust, laitance, grease, oil, dirt, curing agents, impregnations, wax, foreign matters, coatings and deleterious material, from the surface by any appropriate mechanical means, in order to achieve a profile equivalent to ICRI / CSP 3 - 9. The compressive strength of the concrete substrate should be at least 25 MPa (3625 psi) at 28 days and at least 1.5 MPa (218 psi) in tension at the time of application of Sikafloor®-156 CA primer.

MIXING

Mixing Ratio A:B = 3:1 by volume
Do not hand mix Sikafloor® materials. Mechanically mix only. Do not thin this product with water or solvent.
For part unit mixing, i.e. when not mixing full units, each component must be pre-agitated separately to ensure product uniformity. Do not allow mixed material to stand and settle. Failure to pre-stir and keep product agitated will result in variation in gloss levels appearance and performance.
Pre-stir Components A and B separately, making sure all solids, are evenly distributed and uniform consistencies are achieved within each individual Component. Empty Component B (Hardener) in the correct mix ratio into Component A (Resin) or empty Component A into a suitably sized and clean pail and add Component B in the correct ratio. Blend the combined components thoroughly at low speed (300 - 450 rpm) for at least three (3) minutes using a drill fitted with an Exomixer® or Jiffy type paddle suited to the dimensions of the mixing container and keep the mixing paddle in the mix to minimize entrapped air. Take care not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing. When completely mixed, Sikafloor®-156 CA should be uniform in appearance and consistency. Mix only that quantity which can be used within its pot life at actual field temperature.

APPLICATION

Apply the primer to the prepared surface using a squeegee and back roll to provide uniform coverage. Avoid ponding.

CLEAN UP

Clean all tools and equipment with Sika® Epoxy Cleaner. Once hardened, product 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

Sika Canada Inc.
Head Office
601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9
1-800-933-SIKA
www.sika.ca

Other locations
Boisbriand (Quebec)
Brantford; Cambridge;
Sudbury; Toronto (Ontario)
Edmonton (Alberta)
Surrey (British Columbia)