BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET

Sikafloor®-317 UV

WATER-BASED, NON-YELLOWING, CLEAR, MATTE, ALIPHATIC POLYURETHANE TOPCOAT WITH UV BLOCKER TECHNOLOGY FOR FLOORS AND WALLS

PRODUCT DESCRIPTION

Sikafloor®-317 UV is a two-component, water-borne, low odour, non-yellowing acrylic-aliphatic polyurethane topcoat. This high performance clear resin contains a unique UV blocker technology that provides superior ultraviolet light screening properties that significantly improves colour retention values of underlying resin floor systems. It has excellent clarity applied as a matte finish which eliminates reflective gloss on general service or decorative Sikafloor® and Sikagard® resin floor and wall systems.

WHERE TO USE

Sikafloor®-317 UV may only be used by experienced professionals.

Suitable for interior use as a gloss reduction topcoat for a variety of Sikafloor® systems in public and commercial buildings that include:

- Healthcare facilities; hospitals and clinics.
- Research buildings: laboratories, and common areas.
- Education: schools, colleges, and universities.
- Retail spaces: grocery, and department stores.
- Museums, banks, and institutional structures.
- Offices and government buildings.
- Manufacturing facilities and warehouses.

CHARACTERISTICS / ADVANTAGES

- Unique UV blocker technology provides superior ultraviolet light screening properties that significantly improves colour retention values of underlying resin floor systems.
- Compatible thermal shock resistance when applied over Sikafloor® PurCem® mortar systems.
- Low odour formulation suitable for application in occupied facilities.
- Quick curing, tack-free and hard in less than one (1) hour for fast return to service.
- Good abrasion and impact resistance.
- Easily cleaned and maintained surface.
- Low reflective gloss improves visual definition of decorative floors, including multi-coloured quartz and multi-coloured flake systems.
- Low reflective gloss masks minor surface imperfections and improves aesthetics.

APPROVALS / CERTIFICATES

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

PRODUCT INFORMATION

CSC MasterFormat®	**09 67 00 | FLUID-APPLIED FLOORING**
Packaging	6.58 L (1.73 US gal.) units. Components A+B in unitized carton.
Shelf Life	6 months in original unopened packaging.

Storage Conditions	Store dry between 10 °C to 25 °C (50 °F to 77 °F). Protect from freezing. If frozen, discard.
Appearance / Colour	Clear, matte
Solid content by volume	~42 % (mixed)
Viscosity	~250 cps (mixed)
Volatile organic compound (VOC) content	≤ 70 g/L

TECHNICAL INFORMATION

Abrasion Resistance	~0.067 g (~0.0024 oz) CS17 /1000 cycles/1000 g (2.2 lb)	(ASTM D4060)
Coefficient of Friction	~0.58 Wet (smooth matte) ~0.88 Dry (smooth matte)	(ANSI A137.1 /ANSI A326.3) (DCOF - BOT 3000e)
Chemical Resistance	Consult Sika Canada.	

APPLICATION INFORMATION

Mixing Ratio	A:B = 6:1 by volume
Consumption	20 m^2/L (800 ft^2/US gal) at 2 mil (w.f.t.) / ~0.84 mil (d.f.t.) per coat. Two (2) coats recommended. **Note:** Actual coverage rates and material consumption will depend upon porosity and profile of substrates. Allowance must be also made for variation in film thickness or number of coats required to achieve complete coverage of surfaces. Test sections are recommended to establish correct coverage.
Product Temperature	Condition product between 18 °C to 30 °C (65 °F to 86 °F) before use.
Ambient Air Temperature	Minimum 15 °C (59 °F) Maximum 30 °C (86 °F). Low temperatures and/or high humidity will increase curing time.
Relative Air Humidity	Maximum 75% (during application and curing) Sikafloor®-317 UV should not be applied when the Relative Humidity is greater than 75 % as curing times will be longer and water will be retained in the film reducing ultimate coating performance. **IMPORTANT:** Water-borne products require moisture to evapourate from the film to cure to full properties. Provide adequate fresh air ventilation to remove the excess moisture from the curing product.
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. Be aware that the substrate temperature may be lower than the ambient temperature.
Substrate Temperature	Minimum 15 °C (59 °F) Maximum 30 °C (86 °F).
Pot Life	~2 hours at 23 °C (73 °F) **Note:** Care must be taken not to use product beyond its recommended pot life. Material will appear liquid, but is unuseable and will result in poor adhesion.

Curing Time	Dry to touch	~26 minutes at 23 °C (73 °F)
	Hard dry	~6 hours at 23 °C (73 °F)
	Light traffic	~8 hours at 23 °C (73 °F)
	Full cure	~7 days at 23 °C (73 °F)
	Curing times will vary according to air and substrate temperature and relative humidity. Protect from dampness, condensation and water contact during the initial 24 hour cure period. Mechanical, chemical and physical properties will be fully achieved at full cure.	
Waiting Time / Overcoating	Minimum 6 hours Maximum 24 hours at 23 °C (73 °F) **Note**: If the Waiting / Overcoating Time has passed, the previous coat must be lightly sanded, vacuumed and wipe clean with a solvent damped cloth to remove all traces of dust before applying the next coat.	

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

- Prior to application, measure and confirm 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.).
- Do not puddle or apply at excessive thicknesses as this will extend drying times and may cause the product to cure to a cloudy white finish.
- Unsuitable for use as an aggregate binder or mortar grout coat.
- Not suitable for exterior use; use for interior walls and floors only.
- 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 exterior of the building to avoid defects such as amine blush, whitening, loss of adhesion or other surface deficiencies.
- Beware of air flow and changes in air flow. Introduction of dust, debris, and particles, etc. may result in surface imperfections and other defects.
- Published Dynamic Coefficient of Friction (DCOF) wet and dry test results are approximate values based on laboratory test samples produced in a controlled environment following the application instructions published on the product data sheet. Resin flooring products are hand applied finishes subject to minor variations in surface texture due to influences partly beyond Sika Canada's control. Substrate profile, environmental conditions, variable regional aggregate size, shape and gradation, aggregate distribution, uniformity of applied resin mil thickness, and application technique can all affect the final DCOF test results achieved. Adequate provision should be made by the client throughout the selection and installation process to ensure the finished surface texture meets the end user's traction requirements

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.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

New Sikafloor® or Sikagard® Surfaces: Sikafloor®-317 UV must be applied within the critical recoat window following the last application of the Sika resin. If the recoat window is exceeded, the existing Sika resin surface must be sanded (abraded) to remove any sheen or gloss. The prepared surface must then be wiped clean with a solvent-moistened rag to remove all traces of dust, dirt or preparation residue prior to application of the Sikafloor®-317 UV topcoat.

Previously Coated Surfaces: Existing coated surfaces must be intact and tightly bonded to the substrate. Completely remove all traces of waxes or sealers, dust, dirt, oil, grease or other contaminates that may inhibit bonding. Hard or glossy surfaces must be abraded and solvent wiped clean to improve performance.
IMPORTANT: Sika Canada strongly recommends that a trial application be carried out to determine compatibility and acceptable performance of Sikafloor®-317 UV with the existing surface, prior to general

topcoat works being undertaken. Contact Sika Canada for recommendations.

MIXING

Mix Ratio: A:B 6:1 by volume (mix full units only)
Do not hand mix Sikafloor® materials. Mechanical mix only.
Pre-mix each component separately to ensure that any settled material is broken up and all solids are evenly distributed. Uniform clarity and consistencies must be achieved within each component. The container for Component A (resin) is partly filled and sized to allow use as the mixing vessel for a single unit. Start mixing Component A (resin) using a low-speed electric drill (300 - 400 rpm) fitted with an *Exomixer®* type paddle (recommended model), ensuring the paddle is kept within the resin to avoid air entrapment. Add Component B (hardener) to the vortex of the resin being mixed and blend for three (3) minutes until a uniform consistency is achieved. During the mixing operations, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing.

APPLICATION

Thin film, water-based, matte, or semi-gloss topcoats require the installer to be extremely careful during application to use a consistent technique, in a stable, dust free environment to achieve a high quality finish. Uniform appearance and reflective gloss will vary depending upon the following factors:

1. Excessive thickness will yield a glossier cured surface. It is critical to final appearance to employ enough manpower to retain a wet edge, and not allow the product to flash dry during application to prevent unintended multi-layer overlap marks that increase cured thickness and alter reflective gloss properties. Do not apply at thicknesses below or above those recommended as this will result in a variation in gloss level.
2. Control of the microenvironment during application and cure. Water-borne products require moisture to evaporate from the wet coating to achieve full cure. Too low an ambient relative humidity (< 30%) will result in flash drying conditions that increase the potential for multi-layer overlap marks. Too high an ambient relative humidity (> 75%) may cause the coating to skin over retaining moisture in the film that can reduce abrasion resistance and increasing dirt pick-up.
3. Large open areas with natural lighting through exterior windows and/or bright lighting typically enhance the visibility of gloss variation. It is Sika Canada's experience that some areas present conditions that are difficult to achieve a visually uniform finish, free of overlap marks.

Apply Sikafloor®-317 UV by dip and roll method using a 6 mm (1/4 in) low nap lint-free roller. For best results, it is recommended to back roll the wet material in a direction perpendicular to the application. Apply uniformly, avoiding puddles or ridges as they take longer to cure and may remain white, after cure, if very thick. Take care to maintain the 'wet edge' during application to minimize the potential for lap lines.
Allow first coat to become hard dry before overcoating, approximately six (6) hours at 23 °C (73 °F). For correct inter-coat adhesion, additional coats must be applied within 24 hours at 23 °C [73 °F] of completing the previous coat. If the recoat time is passed, the existing topcoat surface must be mechanically abraded, vacuumed and wiped clean with a lint-free, solvent-dampened cloth before proceeding.

IMPORTANT: Sikafloor®-317 UV is a hand applied finish subject to minor variations in appearance and performance due to influences partly beyond Sika Canada's control. It is the client's responsibility to assess suitability throughout the selection and installation process to ensure a satisfactory result. Sika cannot accept liability for application related uniformity issues and strongly recommends that a trial application be carried out to determine compatibility and acceptable performance before general application begins.

CLEAN UP

Clean tools and equipment immediately with water. 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

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