



REMR MATERIAL DATA SHEET CM-SE-1.51

CONCRETE SEALER: SIKATOP 144

1. NAME

SikaTop 144

For application in submerged areas, allow 3 days for cure before putting into service.

2. MANUFACTURER

Sika Corporation
P. O. Box 297
Lyndhurst, NJ 07071
Telephone: 201-933-8800

5. MANUFACTURER'S TECHNICAL DATA

Packaging: Two-component, factory-proportioned kit

3. DESCRIPTION

SikaTop 144 is a polymer-powered, two-component cementitious coating for use on concrete, mortar, and masonry.

- Component A: White-colored emulsified co-polymer; 3.11 gal in a 3-1/2-gal plastic pail; weight: 26.45 lb
- Component B: Blend of selected cements, admixtures, and graded fillers; multiwall bag; weight: 43.55 lb

4. USES & LIMITATIONS

Uses: Use SikaTop 144 as a thin-wearing surface on horizontal decks, slabs, patios, driveways, and other substrates exposed to foot traffic and pneumatic-tire traffic.

Limitations: Minimum ambient and surface temperatures should be 45 °F and rising at time of application. Maximum thickness of application is 15 mils/coat. Greater thickness might result in cracking.

Apply on clean, sound substrate that is surface dry. Do not apply when rain is expected.

Concrete gray and tan colors may show water marks due to uneven wetting in service.

Total weight: 70 lb

Yield: Approximately 5 gal

Shelf life: Component A -- 1 year in original container. Protect from freezing.

Component B -- 6 months in original container. Keep dry.

Storage Conditions:

Component A -- Store at 65 to 80 °F. Protect from freezing. If frozen, discard.

Component B -- Store at 65 to 80 °F. Keep dry.

Colors: Concrete gray, white.

Mixing ratio: Component A: Component B, 1:1.647 parts by weight.

Specific gravity: Component A -- 1.02

Weight/gallon: Component A + B --
approx 14 lb/gal

Application time: (working time)
Approx 1-1/2 hr after mixing the
2 components. Application time is
dependent on temperature; it is
shorter in high temperatures, longer
in cool.

Tack-free time: (73 °F and 50% rh)
Less than 30 min

Recoat time: (73 °F and 50% rh) Allow
2 hr minimum.

Abrasion resistance: (ASTM D 968)
55 l/mil

Bond strength: (pull-off method)
Concrete substrate failure

Water-vapor transmission:

1 coat -- 27 grains/hr-ft²
2 coats -- 24 grains/hr-ft²

6. MANUFACTURER'S GUIDANCE FOR
APPLICATION

Surface preparation: Remove all dete-
riorated concrete, dirt, oil, grease,
other bond-inhibiting materials from
surface. Should surface to be coated
require repair, patch with SikaTop
111/121/122/123 or SikaTop 122 Shot-
crete, depending on thickness of
repair required. Preparation work
should be done by sandblasting, water-
blasting, or other appropriate mechan-
ical means. Substrate should be sur-
face dry prior to application.

Mixing procedure: Place all of Compo-
nent B into mixing container. Then
pour approx 1/2 component A into mix-
ing container.

Mix to consistency of uniform paste
with no lumps. Care should be taken
to scrape down sides of mixing con-
tainer at this time.

When a smooth, uniform paste is
obtained, add remainder of Component A
and mix till uniform consistency.
Sides should not be scraped down once
all of Component A has been added.

Note: If smaller quantities are
needed, be sure to dose components in
correct ratio.

Application and finishing: Apply
coating to prepared surface by either
brush, roller, or spray.

Coating must be mixed to a uniform
consistency. For spray application,
coating must be screened prior to
application. Lumps may be broken up
with gloved hand.

Substrate should be surface dry prior
to application. For hot surface in
direct sun, wet down, then allow sur-
face to dry prior to application.

Two coats are recommended for water-
proofing and protective-coating appli-
cations. Recommended thickness per
coat is 8 to 16 mils.

Apply thoroughly mixed coating gener-
ously with a loaded brush or roller.
Always finish off with light strokes,
blending back into coated area for
uniform appearance.

Curing is not required. If necessary,
protect newly applied coating from
rain. To prevent freezing, cover with
insulated material.

Coverage:*

	Porous Surface (Block)	Smooth Concrete
First coat	100 sq ft/gal	150-200 sq ft/gal
Second coat, if required	150-200 sq ft/gal	150-200 sq ft/gal

* Approximate...based on field
experience.

Application thickness: 8 to 16 mils per coat, depending on substrate.

Caution: SikaTop 144 contains cement and a polymer which may, in certain cases, cause skin irritation. Cleanliness is required. In case of skin contact, wash thoroughly with water. If there is eye contact, wash thoroughly and consult nearest doctor.

manufacturers of such materials. In cases where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous toxic materials.

7. CORPS OF ENGINEERS' EVALUATION (tested as concrete sealers only)

Physical and mechanical properties:

Percent solid
(ASTM D 1644, Method A): 70.6%

Percent moisture absorption
(ambient temp) (ASTM C 642-82):

1 day	4.44%
2 days	4.48%
4 days	4.50%
7 days	4.56%

Ratio of percent moisture absorption for treated to nontreated specimen (2-day submersion): 95.3%

Percent vapor transmittance (see REMR Technical Note CS-ES-1.8):

2 days	0.62%
4 days	0.96%
7 days	1.74%

Ratio of percent vapor transmittance for treated to nontreated specimen (2-day diffusion): 29.9%

8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of activities involving potentially hazardous and toxic chemical substances. Manufacturer's recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets must be obtained from the