

Mapedek Litescreed

Self-Leveling, Lightweight, Self-Extinguishing,
Polyurethane-Based Underlayment



DESCRIPTION

Mapedek® Litescreed is a two-component, lightweight, self-extinguishing, polyurethane-resin-based self-leveling underlayment used to smooth and level interior and external decks before the installation of resin flooring systems and other approved floor coverings.

FEATURES AND BENEFITS

- Levels and smooths decks up to 3/4" (20 mm) in one application
- Chemical- and abrasion-resistant

INDUSTRY STANDARDS AND APPROVALS

- *Mapedek Litescreed* is certified as a "Primary Deck Covering" according to IMO Res. 61(67) FTPC Annex 1, Parts 2 and 6.

WHERE TO USE

- For leveling and smoothing horizontal decks before the installation of resin flooring, floor coverings, ceramic tile and natural stone
- Horizontal interior, exterior and immersion applications

LIMITATIONS

- Do not install over substrates containing asbestos.
- Do not dilute *Mapedek Litescreed* with solvent or water.
- Do not expose the mixed product to sources of heat.
- Do not install over structural or expansion joints in the substrate.
- Do not install over wet surfaces or standing water.
- Use the product at between 41°F and 86°F (5°C and 30°C).
- Do not use the product if the working time has been exceeded.

SUITABLE SUBSTRATES

- Properly prepared, well-supported metal substrates
- Existing polyurethane-based screeds or leveling materials (contact MAPEI Marine's Technical Services for details)

Consult MAPEI Marine's Technical Services for installation recommendations regarding substrates and conditions not listed.

SURFACE PREPARATION

- Substrates must be dry, rigid, solidly fixed in place, clean and free of oil, grease, dirt, dust, corrosion, loosely bonded toppings, and any other substance that would reduce or inhibit bond.
- Prepare steel surfaces by mechanical sanding, grinding, brushing or blasting according to SSPC SP2-3-11 (ISO 8501-1 ST2-ST3) to remove all oxidation. For best results, prepare steel surfaces to SSPC-SP6 (ISO 8501-1 SA2) surface quality or better.
- Prime steel and existing resin surfaces with the appropriate MAPEI primer – such as *Mapedek Primer 200*, *Mapecoat Guard 100* or another approved MAPEI primer – before application of *Mapedek Litescreed*.
- If the substrate is aluminum or another surface not identified here, contact MAPEI Marine's Technical Services for additional information and for which MAPEI primers are best for your type of application.

MIXING

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details.

1. *Mapedek Litescreed* is a two-component polyurethane. Components A and B can separate in shipment, and each component should be blended separately before being mixed together.
2. *Mapedek Litescreed* can either be mixed as a full unit or proportioned by weight. For mixing less than a full unit, carefully measure by weight 4 parts of Component A per 1 part of Component B.
3. *Mapedek Litescreed* can be accelerated using an approved catalyst component. Use only MAPEI's *PU Catalyst* and follow dosing instructions as stated in its Technical Data Sheet.

Note: MAPEI cannot be responsible for issues from the use of non-approved catalysts, or use of *PU Catalyst* not in accordance with our written instructions.

4. Add Components A and B of *Mapedec Litescreed* to a clean mixing container. Mix for 2 to 3 minutes with a 300- to 400-rpm drill with an appropriate mixing paddle.
5. Do not trap air into the mixture by whipping the product at high speed, or by raising and lowering the mixing paddle rapidly while mixing.
6. If mixing the product “neat” (without filler), pour the entire contents of the mixture into another clean dry bucket and mix for an additional 2 minutes.
7. If mixing with the optional *Marine Filler 20* for extension:
 - a. *Marine Filler 20* can be added to *Mapedec Litescreed* at a ratio of up to 1:1 by volume (1 part of *Marine Filler 20* to 1 part of *Mapedec Litescreed*).
 - b. Add *Marine Filler 20* to *Mapedec Litescreed* and blend to completely disperse. Then pour the entire contents of mixture into another clean container and mix again for about 2 minutes.
8. Apply the mixed product as soon as possible to the substrate, within 45 minutes from the start of the mixing process.
9. The working time of *Mapedec Litescreed* will be affected by the product temperature, ambient temperature and substrate temperature. Temperatures above 73°F (23°C) will reduce the working time, and temperatures below 73°F (23°C) will extend the working time. Only mix as much product as can be applied in 45 minutes.
10. Note that use of *PU Catalyst* will significantly shorten the working time of *Mapedec Litescreed*.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Apply *Mapedec Litescreed* to the surface before the expiration of the working time. This is usually about 45 minutes, depending on ambient and substrate temperature.
2. Do not install if the temperature of the substrate is not at least 5 degrees Fahrenheit (3 degrees Celsius) above the dew point temperature.
3. Screed or trowel *Mapedec Litescreed* onto the surface in a thickness of up to 3/4" (20 mm) thick to fill surface depressions or depressions between weld beads.
4. If a second layer of *Mapedec Litescreed* is required, wait until the product has reached final set and can support foot traffic (after about 24 hours).

CLEANUP

- Clean tools promptly with mineral spirits or denatured alcohol before material hardens. Cured material can only be removed mechanically.

CURING

- Cool-weather conditions may extend curing or setting times.
- Warm-weather conditions may accelerate setting and curing times and may reduce working time.

PROTECTION

- Protect *Mapedec Litescreed* from rain or excessive heat during curing.
- Avoid walking on the installed surface for at least 24 hours after installation, depending upon temperature conditions. Protect the installation from traffic, dirt and dust from other trades until *Mapedec Litescreed* is completely cured and final flooring has been installed.

- Do not expose *Mapedec Litescreed* to rolling dynamic loads, such as fork lifts or scissor lifts, for at least 7 days after installation.

Product Performance Properties

Laboratory Tests	Results
Density of mix neat	1.10 kg/L
Density of mix with <i>Marine Filler 20</i>	1.00 kg/L
Tensile strength at 7 days – DIN 53504	435 psi (3 MPa)
Tear strength – ISO 34-1	2,175.6 psi (15.0 MPa)
Maximum elongation – DIN 53504	60%

Shelf Life and Product Characteristics

before mixing

	Component A	Component B
Density of components	1.09 kg/L	1.20 kg/L
Viscosity of components	2,000 mPas	100 mPas
Physical state	Smooth paste	Liquid
Color	Gray	Brown
Shelf life	1 year when stored in original, unopened packaging at 73°F (23°C) and 50% relative humidity (RH)	
Storage conditions	Store in a dry place and protect from freezing	

Application Properties

at 73°F (23°C) and 50% RH

Mixing ratio by weight (Components A to B)	4 to 1
Mixing ratio by volume (Components A to B)	44 to 10
Density of mix neat	1.1 kg/L
Density of mix with <i>Marine Filler 20</i> additive	1.0 kg/L
Mixing time	2 to 3 minutes
Application temperature range	41°F to 86°F (5°C to 30°C)
Consistency of mix	Fluid
Working time in a thickness of 4-5 mm:	1 to 3 hours
Time before allowing foot traffic in a thickness of 4-5 mm:	15 to 18 hours

Complete hardening time	7 days
Thickness range for single-lift applications	0 to 3/4" (0 to 20 mm)

Packaging

Size
Kit: 44 lbs. (20 kg)
Component A: Metal bucket: 35.27 lbs. (16 kg)
Component B: Metal bucket, 8.82 lbs. (4 kg)

Approximate Coverage*

Coverage by full unit: 44.0 lbs. (20 kg) Component A + Component B		
Thickness	Mixed neat	Mapedek Litescreed mixed with 4.81 U.S. gals. (18.2 L) of Marine Filler 20 additive
1/16" (1.5 mm)	130.46 sq. ft. (12.12 m ²)	143.48 sq. ft. (13.33 m ²)
1/2" (12 mm)	16.36 sq. ft. (1.52 m ²)	17.98 sq. ft. (1.67 m ²)
3/4" (20 mm)	11.84 sq. ft. (1.1 m ²)	10.76 sq. ft. (1.0 m ²)

Coverage by unit weight: Neat
0.225 lbs. / sq. ft. / 1/16" thickness (1.1 kg / m ² / 1 mm thickness)

Coverage by unit weight breakdown: Mapedek Litescreed with Marine Filler		
Mapedek Litescreed	Marine Filler 20 (by liters)	Mapedek Litescreed mixed with Marine Filler 20 (1:1 ratio by volume)
0.215 lbs. / sq. ft. / 1/16" thickness (0.7 kg / m ² / 1 mm thickness)	0.063 qt. / sq. ft. / 1/16" thickness (0.75 L / m ² / 1 mm thickness)	0.307 lbs. / sq. ft. / 1/16" thickness (1.0 kg / m ² / 1 mm thickness)

* Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions and installation practices.

ADDITIONAL INFORMATION

Refer to the Safety Data Sheet for specific data related to health and safety as well as product handling.

For information on MAPEI's commitment to sustainability and transparency, as well as how MAPEI products may contribute to green building standards and certification systems, contact sustainability_USA@mapei.com (USA).

WARNING

The test results shown in the TECHNICAL DATA table were obtained in compliance with test methods and curing cycles, if applicable, defined in the industry standards referenced on the Technical Data Sheet. Please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement nor replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

CONTACT INFORMATION

MAPEI Headquarters of North America

1144 East Newport Center Drive
Deerfield Beach, Florida 33442
1-888-US-MAPEI (1-888-876-2734) / (954) 246-8888

Technical Services

U.S. and Puerto Rico:

Flooring: 1-800-992-6273

Concrete and heavy construction: 1-888-365-0614

Canada:

1-800-361-9309

Customer Service

1-800-42-MAPEI (1-800-426-2734)

Edition Date: September 6, 2024 MK 06780 (24-2230)

For the most current product data and BEST-BACKEDSM warranty information,
visit www.mapei.com.
All Rights Reserved. © 2024 MAPEI Corporation.

