

Mapesoil SR

Professional, Hydraulic Binder for Sub-Base Repair of Sports Surfaces



DESCRIPTION

Mapesoil™ SR is a hydraulic binder used to repair sub-bases with vertical and horizontal drainage systems.

FEATURES AND BENEFITS

Mapesoil SR is formulated to be used to repair soil erosion and aggregate drainage sub-bases for playing surfaces made of synthetic, natural and hybrid grass. As a sprayable, cement-based binder containing select additives, *Mapesoil SR* can be easily used to solidify sub-base building materials with high mechanical properties while maintaining desired drainage features whether permeable or non-permeable.

WHERE TO USE

- Aggregate vertical and horizontal drainage sub-base systems for synthetic, natural and hybrid-grass surfaces including sports fields
- Loose, non-organic erosion prevention
- Limited access areas where traditional stabilization is difficult (electrical boxes, track borders, access panels, etc.)

LIMITATIONS

- Do not install if rain is expected within 24 hours of installation.
- An installation of *Mapesoil SR* is not intended to be a wear layer.
- *Mapesoil SR* is not suitable for non-aggregate-based clay or sandy soil.

- The workability time of soil containing *Mapesoil SR* depends on the application conditions and can vary, depending primarily on the ambient temperature during application.
- *Mapesoil SR* should not be applied in ambient temperatures below 41°F (5°C).

SURFACE PREPARATION

- The installation bed for the *Mapesoil SR* mixture must be shaped with the minimum design slope specified for sports fields, thereby guaranteeing that water runs off correctly toward a vertical or horizontal water collection system.
- If the installation base is in particularly poor condition and it is not possible to achieve the engineer's required minimum performance levels, treat the ground beforehand with a fiber-reinforced soil stabilizer such as *Mapesoil 100*, at thicknesses and dosages agreed upon with MAPEI's Technical Services Department.

MIXING

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

1. Mix water and *Mapesoil SR* powder at a mixing ratio of 4 U.S. gals. (15.1 L) of cool, clean, potable water per 50-lb. (22.7-kg) bag of powder.
2. Measure and pour the required amount of water for the number of bags to be mixed into a clean mixing vessel (mixing barrel or plastic pail). For best results, the water temperature should be at about room temperature (70°F or 21°C). The mixing ratio must remain consistent; do not overwater the mixture.
3. Slowly add *Mapesoil SR* powder into the pre-measured water. Use a high-speed drill and an oval paddle mixer to mix *Mapesoil SR* to a homogenous, lump-free consistency. Continue to mix for 2 to 3 minutes. Do not overmix.

Note: For larger applications it is necessary to keep slurry in suspensions via continuous mixing and/or recirculation.

PRODUCT APPLICATION

1. Mixed *Mapesoil SR* can be applied by pump sprayer via wand or boom attachments. When a wand is used, a good-quality brass or stainless-steel wand and tip are recommended. (For smaller areas and tight spaces, mixed *Mapesoil SR* can be poured via a watering can or other similar dispensing container.)
2. Add mixed *Mapesoil SR* slurry to desired application pump sprayer (standard or airless). If a large pump sprayer with a capacity over 50 U.S. gals. (189 L) will be used, have a recirculation pump installed to maintain homogenous mixture during installation.
3. To ensure a suitable mix and flow, test the mixed material from the pump wand or boom in a small test area before general application.
4. The amount of *Mapesoil SR* added to the sub-base depends on the aggregate depth, the desired strength and the desired permeability. The typical dosage of *Mapesoil SR* to an aggregate sub-base is 1.0 to 1.5 lbs. per sq. ft. (4.88 to 7.32 kg per m²) at a depth of 3" to 4" (7.5 to 10 cm).
5. The standard recommended coverage rate is 1 U.S. gal. (3.79 L) of mixture per 10 to 12.5 sq. ft. (0.93 to 1.16 m²).

Contact MAPEI's Technical Services Department if different amounts than those recommended are used.



Note: The applied mixture can be compacted or flattened with a heavy roller within 2 hours of application. However, avoid using vibrating tools/equipment to prevent over-compaction of the mixture if the application is for a vertical drainage system; otherwise, the conglomerate could become less porous and the drainage capacity could be reduced. Working of the applied material after 2 hours can result in improper curing.

Note: For larger applications it is ideal to use a hydroseeder machine or other textured compound sprayers equipped with agitation capabilities.

CLEANUP

- Use water to clean preparation and application tools and equipment before *Mapesoil SR* hardens. Once it hardens, cleaning must be performed mechanically.

CURING

- After applying *Mapesoil SR*, protect the exposed surface from rain and foot traffic for at least 24 hours. Allow 48 hours for a full cure.

Shelf Life and Product Characteristics

Shelf life	1 year in original, unopened packaging stored at 73°F (23°C) and 50% RH
Physical state	Powder
Color	Gray

Protect containers from freezing in transit and storage.

Application Properties

Application temperature range	41°F to 95°F (5°C to 35°C)
Mixing ratio	4 U.S. gals. (15.1 L) of water per 50 lbs. (22.7 kg) of powder
Pot life	Up to 4 hours
Waiting time for secondary applications	6 to 12 hours
Curing time*	24 to 48 hours

* Note that curing time is directly related to ambient conditions such as humidity and temperature and can be shortened or lengthened based on such.



Packaging

Size

Plastic bag: 50 lbs. (22.7 kg)

Approximate Coverage**

per 50 lbs. (22.7 kg)

Aggregate Thickness	Coverage
2" (5 mm)	60 sq. ft. (5.57 m ²)
3" (7.5 mm)	50 sq. ft. (4.65 m ²)
4" (10 mm)	40 sq. ft. (3.72 m ²)
5" (12.5 mm)	30 sq. ft. (2.79 m ²)
6" (15 cm)	20 sq. ft. (1.86 m ²)

*** Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions, type of equipment, thickness applied and application methods used.*

ADDITIONAL INFORMATION

Refer to the SDS 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) or sustainability-durabilite@mapei.com (Canada).

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

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For the most current product data and BEST-BACKEDSM warranty information, visit www.mapei.com.
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