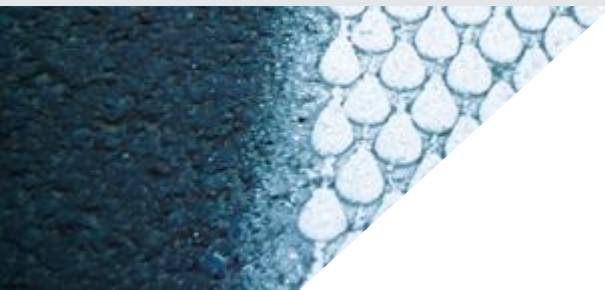
SWARCO LIMBURGER LACKFABRIK GmbH

Road Marking Systems

Repair mortar

TECHNICAL INFORMATION



SWARCO I First in Traffic Solutions.

Repair mortar

Art.-No.: 52317016, anthracite grey
Art.-No.: 5231….RAL

Special application – Repair mortar for road surfaces

Version: 2018-02-20

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1 Main characteristics / Fields of application

Repair mortar…

- belongs to the group of solvent-free, multi-component, reactive systems
- consists of two components which – through chemical interaction – form a duroplastic compound and cannot be thermally plastified thereafter
- is suitable for filling lane grooves, potholes and other damages of bituminous and concrete (primer needed) pavements
- also suitable as glue for curbstones and raised pavement markers
- applicable for height compensation of lowered manhole covers
- levelling compound for milled asphalt pavements (sprinkle grit onto Repair mortar)

2 Technical Data

Color	Anthracite grey, approx. RAL 7016, other colors on request
Density	approx. 1.88 kg/l +/- 0.1 kg/
Pot life	approx. 5 – 10 minutes depends on hardener quantity added and air, material and surface temperatures
Solid content	min. 50%
Trafficability / curing time	approx. 20 – 25 minutes Depends on the climatic conditions. In general, the marking's trafficability must be checked before exposing it to traffic impact.
Solvent for cleaning	Special cleaner for marking machines (Art.-No.: 3086)
Storage stability	6 months; unmixed in sealed original packaging and sheltered from frost and direct sun exposure!
Standard packaging	**Repair mortar:** Tin foil container with 10/15/25 kg filling weight **Hardener powder:** PE-bags – filling weight corresponds to coldplastic quantity and mixing ratio **Attention:** all hardener types are organic peroxides - they must be separately packaged, transported and stored from the coldplastic in special containers (special cartons and boxes). **Drop-on material:** paper bags with PE-inlay – 25 kg filling weight
Identification	The regulations and instructions concerning appropriate transport, handling, storage, first aid and measures, toxicology and ecology are stated in detail in our material safety data sheets! The instructions stated on the product label and in the MSDS must be followed
Surface temperature	min. + 5°C
Processing temperature	+ 5°C to + 45°C
Relative humidity	Max. 75% (dew point spreadsheet has to be regarded)
Layer thickness	> 3.0 mm
Theoretical consumption	approx. 1.88 kg/m² = 1 l/m² for 1 mm layer thickness, the actual consumption depends on the applied layer thickness, type, shape and state of the surface.

3 Mixing ratio / Application technique / Hardener

Product	Art.-No.	Technique	Hardener
Repair mortar anthracite grey Summer formulation Winter formulation **Repair mortar** colored RAL	**52317016** **52317016W** **5231….RAL**	**Open mixture system** Manual application (screed box, trowel or other suitable tools)	Hardener powder
Mixing ratio:	**Base component B** (Repair mortar)	**:** **Hardener powder** (BPO)	**= 100 : 1**
Between October and April Repair mortar is delivered in winter formulation, due to weather conditions			

4 Processing instructions

4.1 Preparation of material and application technique

Repair mortar must be homogeneously stirred in its original container before processing! Then the hardener (powder) is mixed with the base component at the indicated mixing ratio, using an appropriate stirring device. Never prepare more material with hardener than is needed for the application (observe potlife).

Repair mortar is solvent-free and must be applied without adding solvent (see chapter 4.2.). The cleaning must occur before the curing of the material is complete, using special cleaner for marking machines (Art. No. 3086).

The application properties and reactivity of the material depend on the temperatures of cold-plastic, air and surface. Proper storage conditions may partly improve application conditions. The exact machine adjustments have to be made according to the manufacturer's instructions. Layer thickness and drop-on material need to be evenly distributed.

The theoretical material consumption is stated in the table "Theoretical material- and drop-on consumption" on our website.

4.2 Optimizing application properties

Pot life and curing times may be strongly influenced by material, ambient and surface temperatures. High temperature reduce pot life and curing times, low temperature will prolong them. It is possible to influence the reaction time to a certain extent by altering the hardener quantity. Never prepare more material with hardener than is needed for the application (observe pot life). For lower viscosity (e.g. low material, air and surface temperatures) add about 1% condenser (Art. No. 3044).

5 Surfaces / pretreatment

5.1 General information

The surface must be dry, clean and free from grease, oil and loose gravel and other contaminations. The surface and potentially existing old markings must be checked for their carrying capacity and compatibility with the material to be applied. In case of doubt, test applications and adhesion tests are required. Ideally, old markings should be removed with appropriate mechanical procedures.

5.2 Concrete and cement-bound surfaces

The pavement components in new road surfaces that prevent good bonding (fine mortar layer, concrete slurries) must be appropriately removed (e.g. with high pressure waterjet, fine millcut or similar). We recommend conducting test applications.

Before applying Repair mortar on concrete or cement-bound surfaces it should be pretreated with primers:

a. using spray technique (paint spray machine) with 2-component EP-primer (Art. No. 8609000) or
b. manually (roller) with 2-component B71 for concrete primer (Art. No. 8010)

It is essential to have a sufficient and uniform coverage with primer in order to obtain an optimum bonding of the coldplastic and the concrete. Primer consumption may vary depending on the concrete's porosity. The humidity of concrete must not exceed 4% during the application of 2-component B71 for concrete primer. Primers based on epoxy resins are suitable for residual damp surfaces.

5.3 Bituminous surfaces

Depending on the state of damaged bituminous surfaces an all-over application of 2-comp. EP-Primer (Art. No. 80609000) is recommended, which ensures appropriate bonding of Repair mortar.

6 Application techniques

Repair mortar (mixed with hardener powder) is applied evenly onto the damaged area using a screed box or trowel or other suitable tools. Apply the Repair mortar over the edge onto the undamaged pavement, which results in better durability. Drop-on grit material should be sprinkled onto the fresh mortar (for enhanced skid resistance properties), we recommend using 350–400 g/m² grit – Granuflor – (Art. No. 7048 0.5–1.0 mm, grey and Art. No. 7049 1.0–2.0 mm, grey; Art. No. 7051 1.0–2.0 mm coarse, black and Art. No. 7050 0.5-1.0 mm finely granulated, black).