SERVICE-HOTLINE +49 375 2795 123

Profi 1C S

bitumen | thick coating | structural waterproofing | wall | PMBC



Short information

- can be sprayed very well with conventional spraying equipment
- efficient processing with high time savings
- carrying heavy buckets around the construction site, transporting them to the construction pit and scraping out the containers are no longer necessary
- minimal packaging waste - BORNIT® BituBox consists of cardboard and a thin plastic bubble
- particularly fast rain-fastness and thorough drying
- economical consumption due to high dry layer thickness
- immediately ready for processing without mixing directly from the BORNIT® BituBox
- after thorough drying, crack-bridging
- free from organic solvents (solvent-free)
- radon-proof
- frost and de-icing salt resistant

Consumption

- approx. 3.5 - 5 l/m2 depending on water impact class
- adhesion of insulation panels: approx. 2 - 3 l/m2

Storage note

- store not below +5 °C, absolutely frost-free!
- in originally sealed container storable for 6 months

Complementary products

Priming

- BORNIT® Basement Primer
- BORNIT® Basic Primer
- BORNIT® Solidificator (SM3)
- BORNIT® Unibit

Cleaning

- BORNIT® MultiClean
- BORNIT® MultiClean Spray
- BORNIT® Bitumen Cleaner

Follow-up products

- BORNIT® Triangle Tape
- BORNIT® Glass Fabric 165
- BORNIT® Slurry SF
- BORNIT® EasyPipe
- BORNIT® Unibit
- BORNIT® SpeedUp

Content	Item	EAN code	Colour	sufficient for:
Profidicht 1C S 940 l / IBC tank pallet	6900003097	40 17228 00882 0	black	approx. 188.0 - 286.5 m2



Areas of application

BORNIT® Profi 1C S is used for permanent, flexible external waterproofing of building structures in the area in contact with the ground and is applied with spraying equipment. The product is suitable for application on horizontal and vertical surfaces. To select the appropriate spraying technique, please contact our application engineers. BORNIT® Profi 1C S can also be used for intermediate waterproofing (under screed) of floor slabs, balconies and terraces to bituminous and mineral substrates in the area in contact with the ground. BORNIT® Profi 1C S adheres well to all dry and slightly moist mineral substrates as well as bituminous substrates with sufficient stability (e.g., old cold and hot coatings or thick coatings).

Product data in brief

Product type	single-component thick bitumen coating (PMBC)
Base	polymer-modified bitumen emulsion with special fillers
Density at +20 °C	approx. 0.80-0.85 g/cm³
Solvent	none
Application	smoothing trowel, spraying equipment
colour(s)	black
Consistency	paste-like, suitable for trowel application
Processing temperature (ambient and substrate)	not below +5 °C and not above +30 °C
Thorough hardening time	2 to several days, depending on air humidity, temperature, layer thickness and substrate
PH-value	11.0 - 11.5
storage	store not below +5 °C, absolutely frost-free!
Shelf life	in originally sealed container storable for 6 months
GISCODE	BBP10
Substances hazardous to health in terms of the ordinance on hazardous materials	none
Hazard class according to ADR	none
Cleaning	in the fresh state with water, in the hardened state with BORNIT® MultiClean Spray, BORNIT® MultiClean or BORNIT® Bitumen Cleaner
Water impermeability	impermeable at 0.75 bar over 72 hours
Water vapour diffusion factor μ	approx. 8000 (according to DIN EN 12086)
SD value (m)	26.3

Type and properties

BORNIT® Profi 1C S is a modified, single-component, polystyrene-filled and polymer-modified thick bitumen coating (PMBC) for rational application with suitable spraying machines. BORNIT® Profi 1C S is supplied in large containers, the BORNIT®-BituBox, and applied by spraying (operating radius of approx. 75 m possible). The product is characterised by particularly fast rain-resistance and thorough drying. With its high proportion of solids, a high dry layer thickness (more than 90 % of the wet layer thickness) is achieved, with economical material usage. BORNIT® Profi 1C S does not contain any organic solvents (solvent-free). Due to the BORNIT® BituBox as bulk packaging, packaging waste is reduced to a minimum compared to a similar quantity of product in buckets.
After thorough drying, a highly flexible, crack-bridging and watertight foundation waterproofing is achieved, which is resistant to any aggressive substances naturally occurring in the soil.
Optionally, BORNIT® Profi 1C S can be sprayed with reaction accelerator BORNIT®-SpeedUp. In this way, rain resistance can be achieved after a few minutes.

BORNIT® Profi 1C S meets the requirements (Annex 313 / Items 10.1 and 10.2 – Bitumen-based building

products) of the state quality label for sustainable buildings (Quality Label for Sustainable Buildings (QNG)). The label is issued by the German Federal Ministry for Housing, Urban Development and Construction.

Advantages

·particularly fast rain-fastness and thorough drying
·radon-proof
·economical consumption due to high proportion of solids and high dry layer thickness
·sprayable with suitable equipment
·highly elastic due to high-quality polystyrene and polymer modification
·immediately ready for processing without mixing
·crack-bridging after thorough drying
·with fully and flushly grouted masonry, no plaster layer required
·adheres insulation panels to concrete, masonry and thoroughly hardened thick coatings
·free from organic solvents (solvent-free)

Surface

Step 1: The substrate must be free from ridges or shard-edged unevennesses as well as soil.
Step 2: Unfilled or badly filled depressions, such as masonry joints, mortar pockets or surface defects larger than 5 mm must be repaired with suitable mortar. No plaster layer is required for fully and flushly grouted masonry. Voids smaller than 5 mm as well as pores in the substrate can be closed by applying the thick bitumen coating in a scraping manner. Especially for concrete surfaces, application in a scraping manner is likewise recommended in order to avoid the formation of bubbles.
Step 3: It must be observed that the substrate is firm, clean, free from dust and free from separating substances. The substrate should be dry and absorbent. The surface temperature must be at least 3 Kelvin above the dew point temperature of the ambient air.
Step 4: A priming layer of BORNIT® Basement Primer or BORNIT® Unibit (diluted with water 1:2) must be applied to the substrate. For solidification of sanding substrates, priming with BORNIT® Solidificator SB3 (diluted with clean tap water at a mixing ratio of 1:1) is recommended. When applying the thick bitumen coating in a scraping manner, the primer must be applied in advance. A scratch coat does not replace the primer. After drying of the primer, the substrate is prepared for the application of the scratch coat or the thick coating, resp.

If the substrate is sound, dust-free, dry and slightly absorbent, a primer coat is not necessary.

Important: During the construction phase, thick bitumen coatings can be damaged by water affecting their rear side. In principle, it must be ensured that the coating is not damaged by water affecting the adhesive side. If necessary, water-impermeable intermediate layers of mineral sealing slurry (e.g., BORNIT® Slurry SF) must be applied, which cannot be detached from the substrate by water pressure.

Processing

Upon processing BORNIT® Profi 1C S, in principle, the current DIN 18533 must be observed. The processing of PMBC depends on the respective water impact class at the building object. Therefore, it must be observed that the water impact class present is clearly specified by the planner prior to the start of any work.
BORNIT® Profi 1C S is delivered ready for use and applied to the substrate prepared as stated above using suitable spraying equipment (e.g. GRACO GH 5040). BORNIT® Profi 1C S must not be applied in case of frost or impending rain. Processing should be undertaken at object and ambient temperatures not below +5 °C and not above +30 °C.

When processing with BORNIT®-SpeedUp, a special 2C spray gun and a second spraying device (e.g. Graco GMAX II 3900) are mandatory. Optimum mixing of the two components is achieved by 2 separate spraying nozzles. The mixing ratio should not exceed 5 % BORNIT® SpeedUp to BORNIT® Profi 1C S. More detailed information is available at a special seminar for waterproofing applied by spraying devices in our company.

Application of the thick coating is undertaken according to the current DIN 18533 in two layers. Upon waterproofing against ground moisture and non-pressing water (DIN 18533 W1-E) and splash and capillary water (DIN 18533 W4-E), the layers can be applied fresh on fresh.
Upon waterproofing against moderately pressing water (DIN 18533 W2.1-E) and non-pressing water on ceilings covered with earth (DIN 18533 W3-E), the first waterproofing layer must have dried off to such extent prior to application of the second layer, that it is not damaged by the application. A reinforcing insert (BORNIT® Glass Fabric 165) must be embedded into the first waterproofing layer over its entire surface.

According to the current DIN 18533 standard, hollow fillets must be formed using a mineral material (BORNIT® Sealing Mortar) as an approx. bottle diameter-sized hollow fillet or with a two-component thick coating (BORNIT® Repabit, quick-drying) prior to the surface sealing. As a deviating, yet innovative and secure problem solution, here we recommend the use of BORNIT® Triangle Tape (bitumen profile, fusible) as an alternative. Special attention must be paid to proper execution of the waterproofing in the area of joints, connections and terminations as well as penetrations.

The fresh coating must be protected from rain and solar irradiation!

We recommend using BORNIT® 2C Flex Bitumen Thick Coating or BORNIT® Profi Hybrid 2C in conditions of high humidity, impending rain, or cool weather.

The dried sealing must be protected from damage and UV radiation. However, protective and drainage layers should only be applied after the sealing layer has completely dried (2 to several days, depending on weather conditions and the substrate). BORNIT® Profi 1C Express can be used for manual application, and BORNIT® Profi 1C S for machine application to bond insulation boards. Suitable protective layers include plastic dimpled membranes with a sliding film and filter fleece, as well as drainage boards. The backfilling of the excavation should be carried out promptly. DIN 18533-1 Section 14 must be observed during this process

Consumption
·for the water impact classes ground moisture / non-pressing water (DIN 18533 W1-E) as well as splash and capillary water (DIN 18533 W4-E):
approx. 3.5 – 4.0 l/m2 = wet layer thickness 3.5 mm = dry layer thickness 3.0 mm

·for the water impact classes moderately pressing water (DIN 18533 W2.1-E) and non-pressing water on ceilings covered with earth (DIN 18533 W3-E):
approx. 4.5 – 5.0 l/m2 = wet layer thickness 4.5 mm = dry layer thickness 4.0 mm

·adhesion of insulation panels:
approx. 2 l/m2 with punctiform adhesion
approx. 3 l/m2 with adhesion over the entire surface

The provided consumption figures are practical experience-based values.
The consumption for the required scratch coat depends on the roughness of the substrate and must be calculated separately.
The thickness allowance according to DIN 18533-3 must be taken into account.

Health and fire protection, occupational safety

To ensure safe handling of the product, the physical, safety, toxicological and ecological information provided online, the information in the current safety data sheet and the additional information on the label must be read and followed before purchasing or using the product! The applicable regulations, ordinances and laws must be complied with.

In case of doubt, please contact the BORNIT® application technology department or the BORNIT® service hotline on +49 375 2795 123.

Warning notices

GISCODE	BBP10
UN-number	No dangerous good in sense of these transport regulations.
Hazard-determining components for labelling	1,2-Benzisothiazol-3(2H)-on
EUH-records	EUH208: Contains 1,2-Benzisothiazol-3(2H)-on. May produce an allergic reaction.
Recommended, personal protective equipment:	

CE marking

CE

1023

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2014

6900003097/2016

EN 15814:2011+A2:2014
Polymer-modified thick bitumen coating
for waterproofing building components in contact with the ground
PMB - CB2-W2A-C2A

Water tightness	W2A
Crack-bridging capability	CB2
Resistance to water	Passed
Flexibility at low temperatures	Passed
Dimensional accuracy at high temperatures	Passed
Fire behaviour	Class E
Compressive strength	C2A
Durability of water tightness and fire behaviour	Fulfilled

Disposal note

Only recycle completely empty containers. Material residues can be disposed of according to AVV-ASN: 080410 (waste adhesives and sealing compounds except for those falling under 080409).

Note

This data sheet supersedes all previous technical information relating to the product. Such information is therefore no longer valid. The details have been compiled in accordance with the latest state of the art in application technology. Please note, however, that depending on the condition of the building, it may be necessary to deviate from the working methods recommended in this data sheet. Unless otherwise agreed in an individual contract, all information contained in this data sheet is non-binding and therefore does not constitute an agreed product specification. We reserve the right to make changes to the information contained in this data sheet at any time. We recommend that you check our website www.bornit.de for any updates.

The product illustrations are to be regarded as examples. No legally binding claim can be derived from them. We reserve the right to make changes to the product's appearance.

Our packaging complies with the relevant legal requirements and with Regulation (EU) 2025/40 on packaging and packaging waste (PPWR). The technical documentation in accordance with Annex VII is available and can be provided on request by emailing info@bornit.de.