

# BG QUICK®

## Road-levelling

**For thicknesses above 6mm**

### INSTRUCTION MANUAL

#### PREPARATION OF THE SURFACE

- Remove dust and dirt – preferably by pressure washing (WAP, Kärcher) / in winter **up to -7 °C** by 10 – 20% solution of salt-water (kitchen salt) and at lower temperatures by solution of calcium chloride. Temperatures deal with the background as well!
- Remove silty soil by a shovel or a trowel.
- Remove the non-adherent parts of the original structure before doing so.
- You may want to remove oxidized asphalt from the edges by a pneumatic drill.
- It is not necessary to cut sharp edges with a diamond cutter or to mill the area.
- BG QUICK® can be applied to damp but not wet surface.
- Any puddles have to be swept or pumped out.
- Snow (powder snow) has to be swept out.
- Ice shall be first removed mechanically and then by brine deicer or a PB burner.
- If you applied BG QUICK® on a layer of ice, it would melt and ruin the material.



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## MIXING AND APPLICATION

- BG QUICK<sup>®</sup> is a two-component compound. Small amounts can be mixed manually. An electric drill with a stirrer can be used for bigger amounts. A motionless mixer (the container stays still and only the mixing fins are moving) is used for greater amounts.
- **Before opening the bucket containing the powder compound lay the bucket on the ground on its side (leaving it closed) and roll it about two times around to eliminate inhomogeneity in granularity.**
- Pour the required amount of powder (Component B) to a container and add the liquid (Component A). You should mix the compound not far from the place where you intend to apply it. Mix the two components quickly (for 1-2 minutes) until you get a homogeneous mixture, pour the mixture quickly into the place where it should be applied and spread it with a lath to get the required thickness. Make sure that the whole content of the container is mixed thoroughly from the bottom – move the stirrer vertically to the sides and corners. Mixing for longer than 2 minutes is not recommended.
- The volume ratio is approximately 1 litre of the liquid for 3 litres of the powder.
- This ratio is approximate only. Up to 30% of additional liquid can be added if necessary without any properties loss.
- Do not leave the mixed material in the bucket! It sets very quickly in higher volumes and it will become unusable. Always mix such amount that you can process within minutes!
- For **thickness greater than 30 mm** you can add 2 litres of washed, dried gravel, preferably medium grain size up to 9 mm (4/8 grit-rock), for each litre of liquid. Dust in the gravel increases material usage!
- For the closing layer (the top 15 – 30 mm if necessary from aesthetic reasons) use the original mixture without added gravel. The layers will blend perfectly. The time intervals between individual layers can be as long as needed after getting cool. Don't lay new layer on an old one heated by reaction heat!

## PLACEABILITY AND SETTING RATE

- Placeability and setting rate depend on the temperature of the actual material but mainly on the type of road on which it is placed and also on the thickness of the layer. Mixing the powder component with the liquid activator results in heat of reaction, which heats the mixture to temperatures as high as 60°C. That's why a big amount of mixed material sets fast and becomes unusable, if left in a bucket or in a mixer.
- When the mixture is poured onto the road, it either starts to get warmer, depending on the weather conditions, due to the hot asphalt and it sets faster, or it gets colder due to the frozen surface and the setting process is slowed down. The thickness of the layer matters as well.
- According to our experience BG QUICK<sup>®</sup> can be used without a set accelerator for road and air temperatures above 10°C, for layer thickness above 20 mm.
- For temperatures lower than 10°C and thin layers (below 15 mm) we recommend using the set accelerator (the bucket with a red stripe). If the set accelerator isn't used, BG QUICK<sup>®</sup> sets slowly – in the range of hours.



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- When working in subzero temperatures using the set accelerator is a must, otherwise it would set in about 2 days. However, if we have enough time, BG QUICK® eventually always sets.
- The ginger accelerator's proportion should be no more than 20% of weight in relation to the weight of the liquid (or 4% of the total weight of the mixture). That way you can speed up the setting process to 20 minutes (for temperatures of -23 °C).
- The accelerator (bucket with a red stripe) is poured into the powder before adding the liquid. After adding the accelerator, mix the material shortly (in a similar way you would mix cement with sand), then you can add the liquid and finish mixing.
- The proportion of the accelerator may be reduced in order to control the acceleration.
- The proportioning depends on the temperature of BG QUICK® as well. If it is stored in a warm room, a smaller proportion is needed. If it is stored in open space in winter (which is recommended and doesn't damage BG QUICK® in any way), then the proportion of the accelerator must be bigger.
- We recommend trying some BG QUICK® proportioning before each repair job in small amount (about 2-3 kilos). Every working crew will soon master the mixing based on the temperature of BG QUICK®, air and road as well as based on the layer thickness (or the depth of the hole that's being repaired).
- Instead of using the accelerator you can heat the road surface by PB burners or heat the newly placed layers of BG QUICK® especially on the thin edges. However, the heating must be mild! It would be undesirable to melt the asphalt. Burning the asphalt would result in a layer of smoke black that wouldn't adhere to BG QUICK®.
- We recommend using PB flame from a longer distance and heat the road using the hot air from the burner rather than the flame itself. Recommended temperature for heating is 50°C.
- There is a chemical set retarder for work in high temperatures, which is added to the liquid at least an hour (better one day) before mixing in the proportion of 3% for the total weight of the material. However, under these conditions it is best to use BG QUICK® frozen to -18 °C in a refrigerator.
- BG QUICK® is firm and can crack by the action of overloaded trucks' traffic at a road with bad foundations. But BG QUICK® is remaining adherent to the base if you had washed thoroughly and even cracked it carries out its duty - to even the surface for a long time.

## PACKAGING

- BG QUICK® is delivered in five containers containing 40 kg of material. There are labels on the containers and coloured stripes around them (according to Coloured Marking Containers): 4x40 kg of the powder compound and 1x40 kg of the liquid (activator). When the compounds are mixed you get 200 kg of material. In wintertime you can also order a container with accelerator (red stripe) and retarder in summertime (yellow stripe). Other packaging is available but is subject to surcharge.
- An **antislippery** mixture with UV protection and wear resistance for white or coloured coating on asphalt, concrete, paving or other surfaces (pathways, footpaths, roads) is also available.



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- Glue for work under wet conditions or frost for fixing loose ceramic, concrete and stone paving is also available.

## STORAGE

- BG QUICK<sup>®</sup> can be stored for an unlimited period of time if kept in the original closed PE containers.
- If the container has been opened, BG QUICK<sup>®</sup> must be used within one year.
- Store in a dry place. Frost doesn't affect BG QUICK<sup>®</sup>'s quality.
- BG QUICK<sup>®</sup> must not be exposed to direct sunshine or stored in temperatures above 30°C.

## WARNING

- Do not add water!
- The stirrer and other tools should be washed by water in ten minutes.
- Polymerization releases heat of reaction higher than 60 °C.
- Polymerization releases a small amount of ammonia.
- Protect your eyes and skin.

## WORK AND HEALTH SAFETY

- When working in closed buildings, make sure the space is sufficiently aired.
- It is recommended to use protective goggles and gloves.

## FIRST AID

- EYES..... If eyes have been contaminated, flush them with water for at least 15 minutes. If irritation persists, immediately seek medical advice.  
SKIN..... Promptly wash the contaminated skin with water for at least 15 minutes. If irritation persists, immediately seek medical advice.
- SWALLOW ..... If the person is conscious, have them drink large amount of water and induce vomiting. Immediately seek medical advice.



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