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| TECHNICAL DATA SHEET | Issue: 2 | Version: 3 |
| BK-MAL 420 | RZ-TLP-044-02 | Date: 24.12.2021. |

1. PRODUCT AND COMPANY INFORMATION

Commercial product name: BK-Mal 420

Manufacturer:

Banja Komerc Bekament DOO
Kralja Petra Prvog 132
Arandelovac
tel. 034-6777-500
fax. 034-6777-505

TDS contact: email: laboratorija@bekament.com

2. DESCRIPTION, FIELD OF APPLICATION

BK-Mal 420 is a cement-lime mortar used for machine and manual application onto the exterior brick walls, construction block walls, concrete walls, concrete panels, etc. The product is mechanically very hard and has good adhesion to the surface. This type of mortar is particularly suitable in locations where heavier wall elements will be installed subsequently.

3. COMPOSITION

Chemical composition: Grey cement, lime, additives, mineral filler.

Hazardous substances: In accordance with the (EC) Regulation No. 1272/2008 on classification, labelling and packaging of substances and mixtures, through which the CLP/GHS classification and labeling system was introduced into law, components of the grey Portland cement and lime are hazardous substances. The product is therefore classified a hazardous one with the following label: Hazard

4. TECHNICAL CHARACTERISTICS

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|---|---|
| Bulk density, g/dm³ | 1,200-1,400 |
| Hardened plaster density, g/dm³ (EN 1015-6) | 1,300-1,400 |
| Flexural strength, MPa (EN 1015-11) | ≥ 1.5 |
| Compressive strength, MPa (EN 1015-11) | ≥ 2.5 Class CS II according to EN 998-1 |

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| Adhesion to concrete, MPa (EN 1015-12) | ≥ 0.3 |
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| Capillary water absorption coefficient, kg/m²min^{0,5} (EN 1015-18) | ≤ 0.4 Class Wc1 according EN 998-1 |
| Water vapor diffusion resistance coefficient-μ (EN 1015-19) | ≤15 |
| Indicative consumption, kg/m²/cm layer thickness | ~12-13 |
| Packaging, kg | 30 |

5. OTHER CHARACTERISTICS

Physical appearance: Grey powder

Wet plaster pH value: 11-13

6. SURFACE PREPARATION

The surface to which the mortar is applied must be firm, clean, and dry, without poorly bound parts, greasy stains, etc. All concrete surfaces (at least 2 months old), brick walls, construction block walls, gas concrete, etc. are appropriate surfaces. Filling in major empty spaces and leveling out in greater thickness must be done using the same product BK-Mal 420 by applying it in multiple layers, while reinforcing the individual layers using a reinforcing mesh.

When applying the mortar onto brick walls and construction block walls, no previous preparation of the base is needed.

When it comes to smooth surfaces where there usually is leftover oil from sheeting, it is necessary to clean the remaining oil with hot water spray, priming must be done using BK-Beton Kontakt so as to achieve better adhesion of the mortar to the basis. When applying mortar on highly absorbent, as well as unevenly absorbent surfaces (gas concrete construction blocks), priming must be done using BK- Nivelator in order to balance out the absorption and prevent the appearance of cracks on the mortar due to different rates of drying. Alternately, in both cases, surface preparation may be done using a previous application of syringe mortar BK-Mal 420.

7. PREPARATION AND APPLICATION

Closing wide and deep cracks openings from electric or other forms of installations must be completed before you begin applying the mortar. Mortar preparation is done using a machine by mixing the dry mortar with about 22-24 % of water (approx. 7l of water for 30kg of powder). Mortar is usually applied in two phases using the “fresh-on-fresh” method, using a machine onto a previously prepared dry surface. Its thickness must be at least 10 mm and at most 25 mm. In case thicker plaster is needed, the first layer of plaster should be 25 mm thick, and then apply the remaining plaster up to maximum total thickness of 40 mm to the fresh material which is already partially adhered. Mortar is leveled out after application using an H-shaped aluminum profile. After a certain period

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of time, depending on the conditions at installation sit (usually few hours), the final works on the mortar may begin (scraper or any other appropriate tool).

Optimal air and surface temperature at installation is between +5 °C and +30 °C. The mortar should be protected from drying too quickly. Exposing the mortar directly to heat is not allowed because the mortar must harden evenly.

The drying time of the mortar before further work is done is at least 10 days per cm of mortar thickness.

8. CLEANING THE TOOLS

Transport pipes and all other tools must be thoroughly washed using water immediately after use. In order to ease cleaning, the mortar should not be left in the pipe for more than 30 minutes. If the tools are not washed immediately after use, remove the hardened residue mechanically.

9. HANDLING AND STORAGE

The material must be transported in sealed bags. If the product is used in closed rooms, make sure the space is well ventilated. Protect your eyes and skin when working with wet mortar due to an alkaline reaction. Keep out of reach of children.

Store the material in dry rooms, on pallets, protected from moisture.

Shelf life: 12 months.

10. PERSONAL PROTECTION

Respiratory tract protection: Not needed when the rooms are well aerated.

Hands and body protection: When the skin is repeatedly exposed to the mass, a preventative use of protection gloves is recommended. Use long-sleeve work overalls.

Eye protection: Use safety goggles as a preventative measure in order to protect the eyes from the dust and wet mortar.

11. REGULATION INFORMATION

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Hazard

Skin irritation, Category 2: H315

Skin sensibility, category 1: H317

Heavy eye damage, Category 1: H318

Specific target organ toxicity – one-time exposure, irritation to respiratory organs, category 3: H335

H-labels:

H315 Causes skin irritation.

H317 May cause skin allergic reactions

H318 Causes serious eye damage.

H335 May cause irritation to respiratory organs

P-labels:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333 + P313 If skin irritation or rash occurs: Get medical advice / attention.

P304+P340 IF INHALED: Take the injured person to fresh air and place in resting position which does not obstruct breathing.

12. ECOTOXICOLOGICAL INFORMATION

Based on experiences and information currently available, no negative health effects are known when the product is used appropriately. Prevent uncontrolled discharge into sewage and waterways.

13. STORAGE

In accordance with local/regional/European/national regulations.

14. OTHER INFORMATION

If the contractor notices an aesthetic or application deficiency while using the mortar, he is obliged to cease the works and notify the manufacturer of this. The manufacturer will consider the claim in the shortest possible time frame. Complaints to the manufacturer upon using a significant portion or the entire amount of the materials are not subject to claims.

15. NOTE

Banja Komerc Bekament DOO performs product quality checks using its own laboratories. It also regularly tests its products in certified laboratories. The Data Sheet is the product of our knowledge and previous practical experience. The purpose of the Data Sheet is to serve as a recommendation in order to achieve the best possible

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results. If weather and other conditions are different than those described in our instructions, our instructions need to be taken as general guidelines, without an installation warranty.

Banja Komerc Bekament DOO assumes no liability for damages resulting from the improper use or incorrect product selection, as well as for poorly executed work. It is assumed that the contractor has mastered the techniques of installing and use of various products.

Matters written herein bind us in no way.

This document replaces all previous versions. All previous versions, starting with the listed date the document was compiled, are void.

Date: 24.12.2021.

Previous version: Version 2.1. – 19.12.2020.

Amendments: Chapters: 1 and 11.