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LAKSIL

Category A, B: pursuant to Annex 7, Reg. of the Ministry of the Environment (MoE) No. 415/2012 Coll. A/ i) one-component coating compositions with special function A/h) coating compositions

SPECIAL ONE-COMPONENT SILICONE-ACRYLIC LACQUER

For aggressive environment and under water with increased resistance to UV rays...

CERTIFIED: for permanent contact with drinking water, food and for the treatment of children's toys.

CHARACTERISTIC:

LAKSIL is a silicone-acrylic lacquer designed to effectively protect materials for which it is desirable to maintain their original appearance. The varnish well withstands the effects of both weather and sunlight. Its hardened film tolerates well the presence of selected inorganic and some organic (acetic, citric) acids as well as weak alkalis. Resistance to petroleum products is acceptable only for higher fractions: oil, LTO. LAKSIL is intended both for the formation of continuous protective coatings, and for the penetration and strengthening of porous substrates: wood, concrete, sandstone, masonry, eternit, etc. Due to its strong barrier effects and natural inhibitory properties, the varnish is also preferably used to protect unoxidised surfaces of non-ferrous metals (Cu, Zn, brass, bronze) and steels (always at least 3 layers depending on the conditions). Separate use of paint on metal substrates is limited by the degree of corrosion aggressiveness C3 included, according to CSN EN ISO 12944-2. Wooden substrates exposed to prolonged sunlight must be first thoroughly impregnated with a special penetration agent BILEP F in UV modification when using the colourless varnish LAKSIL. The varnish does not contain biocidal substances acting against biotic infestation of the substrate (wood-destroying and wood-staining fungi, algae, mould, etc.). For concrete, the paint and impregnation (subcat.A/h, Decree 415/2012 Coll.) is used to protect against ingress of water and moisture, to regulate humidity and to increase resistance by limiting the moisture content (CSN EN 1504-2).

COLOR SHADE:

colourless. LAKSIL is produced in three gloss levels for subcategory A/i) VARNISH: glossy, semi-flat and flat.

FEATURES OF COATING:

Content of non-volatile components in varnish: at least 35% (wt., slight differences between modifications); organic solvents (VOC), xylene isomers (index 601-022-00-9); see "Classification" below for further VOC parameters.

Gloss (glossy modif.) : according to CSN ISO 2813 (ProGloss BYK GARDNER ... G=60°) min 50 units

Adhesion: according to CSN ISO 2409 to steel, Al, Zn, Cu and glass, min. class 1; tear-off test (EN 1542): steel, concrete, asbestos-cement >2.0 MPA.

Hardness: PERSOZ pendulum, min. 15% (20°C)

Yield: 6 - 8m²/1kg of paint in one layer (The information is indicative and is significantly influenced by the structure of the substrate and the segmentation of the painted surface). Drying: gr. 2 (20°C, rel. hum. 65%); film is not sticky: in about 60 minutes

Dynamic viscosity: according to CSN EN ISO 2431 Ford d=4mm min.30s

The varnish is applied in at least two layers. The optimum thickness of the hardened film for final protection is 120 µm or more (corresponds to 3 layers). Appearance of hardened film is continuous, fused, glossy (glossy modif.), velvety appearance (flat version).

The coating is also harmless to health and, moreover, non-absorbent with water. Flowing capacity: excellent (glossy modif.).

Sprayability: Without dilution – good (airless only).

Spreadability: 1st layer excellent, other layers: sufficient,

water permeability (EN 1062-3): low (w < 0.1 kg/m².h0.5);

vapour permeability (EN ISO 7783-1): permeable (class I: sD < 5 m);

permeability CO₂ (EN 1062-6): low (SD > 50 m).

Corrosion resistance LAKSIL (DFT=300 µm, steel: 2000 h. immersion in water; CSN EN 2812-2): CONFORMS: no changes, no defects!

Resistance of coating system to weathering on wood (CSN EN 927-3), impregnation BILEP F, 1 substrate layer and 2 top LAKSIL layers: End-use category: SEMI-PERMANENT Resistance to the action of ordinary liquids: according to CSN ISO 2812-1, met.2 (24 hours) ... no changes (drinking water, diesel oil, transmission oil, 8 % acetic acid, white wine, common cleaning agent (JAR), fruit juice NaOH 2%, NaCl 10%,...). It does not resist the action of butyric acid, propionic acid or most organic volatiles (VOC).

APPLICATION:

The varnish is applied by brush, roller, dipping or spraying (airless only; penetration can also be sprayed with air!). The first layer is better to apply with a brush. Leave the previous layers of LAKSIL to dry well and harden. The varnish is applied to a dry, dirt-free substrate. Biotic infested substrates must first be professionally sanitised and a decision on preventive biocidal protection must be made according to the conditions. MP (mineral absorbent substrates) should be first impregnated with varnish diluted to 25-100% diluent (wt.) (according to the properties of the substr.) in an amount until the mixture is visibly absorbed. When using wood varnish, use a special microdisperse preparation BILEP F for impregnation. Undiluted varnish is then applied in two or more layers according to external conditions. Dried film is non-sticky. The temperature of the substrate and the surrounding area during

application should not fall below + 8 °C. At 20° C, the coating is non-sticky in 1 hour, hardened in about 8 hours. Next layers should be therefore applied under normal conditions only not earlier than after 8 hours. Stir both flat and semi-flat varnish before and during use! Wood exposed to intense sunlight and weathering should be first impregnated with a special agent BILEP F in UV modification! Clean new wood before painting with a mixture of solvent S6005 and ethanol (about 1: 1)! LAKSIL as an overall protective coating composition for metals for exposure to weathering: 1x impreg. (diluted 25% diluent) + 2-3 applications (spray) of LAKSIL (for C3-C4, CSN EN ISO 12944 -2).

NS LAKSIL for CONCRETE, MP under water: 1–2 applications impreg. 1-2x impreg.

(diluted 70–100% diluent) + 5 paints (spray) LAKSIL (overall indicative paint consumption 0.70 kg / m², corresponds to about 300µm of hardened film).

LAKSIL coating composition – impregnation only (LAKSIL diluted 70–100% diluent) on concrete, MP (mineral substrates), 2 applications (under water: 2–3 appl. according to the degree of absorption of the mixture). LAKSIL IMPREGNATION according to CSN EN 1504-2m Art.3: 3.1 hydrophob.impreg., 3.2 impregnation (strengthening). Special applications better consult with the producer.

DILUTION:

Xylene, S6005. The paint is ideally diluted from the factory. Concerns the use of subcategory A/i) VARNISH – spec. One-component coating composition. For impregnation of absorbent substrates, it is assumed to add up to 1.0 wt. multiple (100% wt.) of diluent S6005 (or tech.xylene), use as subcategory A/h) PENETRATION (impregnation).

YIELD:

5 -7 m²/kg of paint in one layer. (This information is indicative and is significantly influenced by the structure of the substrate and the segmentation of the painted object. Theoretical consumption: 0.23kg of paint/m², wet layer: 230µm; hardened film: 100 µm.

SHELF LIFE:

24 months from the date of production in dry storage at temperatures from + 5 °C to + 30 °C. PACKAGING: (consumer)

- in varnishes 99/122 (119) with a net weight of 0.70 kg,

- in buckets of 153/246 with net weight of 3.50 kg,

- in buckets 242/231 with a net weight of 8.00 kg.



CLASSIFICATION, INSTRUCTIONS for SAFE HANDLING:



Signal word: Danger. (isomers of xylene: Index 601-022-00-9)

According to the Regulation of the European Parliament and of the Council (EC) No. 1272/2008, the coating composition is classified as a hazardous chemical compound. H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe spray. P280 Wear protective gloves. P301+P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P331 DO NOT induce vomiting. P370+P378 In case of fire: Use powder extinguisher/sand/carbon dioxide to extinguish. According to Regulation of the Ministry of the Environment (MoE) No. 415/2012 Coll., the product falls in category A, subcategory i: special one-component coating composition and subcategory h), penetration coating composition. The product contains 480g/l of organic volatiles (VOC); limit conc. according to Annex 7 of Reg. 415/2012 Coll., 500g VOC/L. Product density: 0.90 g/cm³, dry matter content: 46.0

%; VOC: 0.55kg/kg; TOC: 0.497 kg/kg; max. VOC for use: 500g/L (min. prod. dens.: 0.90 g/cm³). Contains organic solvents (VOC)... xylene isomers: Index 601-022-00-9: < 0.55% (wt.). According to CSN 650201 LAKSIL coating composition is a flammable liquid of hazard class II.

WASTE:

Clean steel non-returnable packaging to be recycled into the collection materials. Take the packaging with paint residues to a place designated by the municipality for the collection of hazardous waste. Allow the larger unnecessary amount of paint to dry and hand over for burning, preferably in a pyrolytic incinerator. Waste producers (firms authorised to conduct business) must dispose of waste in accordance with the law. Waste codes: 080111 - hardened paint a) or varnish N), 150104 – metal packaging O) The company is involved in the system of ensuring the use and return of EKO-KOM packaging No. EK-F – 05000020.

TRANSPORT INFORMATION

ADR-Class 3, digit F1, RID – Class 3, digit F1, number UN-263, Hazard pictograms: GHS02, GHS07, GHS08.

DOCUMENTATION:

Declaration of Conformity (Section 13 (2), Act No.22/1997 Coll., as amended, Issue in accordance with Annex 1, National Decree No. 163/2002, as amended,, based on certificates and STO: č. 227/C5/2013/0330, č. 227/C5/2013/0331, 227/C5/2013/0332; STO 227-STO-13-0331, 227-STO-13-0332 z 21.10.2013, issue AO227. The product also meets the conditions stipulated by the Decree of the Ministry of Health of the Czech Republic No. 38/2001 Coll., on hygiene requirements for products intended to come into contact with foodstuffs and dishes, further by the Decree of the Ministry of Health of the Czech Republic No. 84/2001 Cool., on hygienic requirements for toys and products for children under 3 years of age and also by the Decree of the Ministry of Health of the Czech Republic No. 409/2005 Coll., on hygiene requirements for products in contact with drinking water (with the exception of modifications with metallic pigments). For protective coatings for concrete PVE No. 14021101 according to Reg.(EC) No. 305/2011 (CPR) with the provisions of standard CSN EN 1504-2 (Tab. ZA3a, syst. 2+) notifying body No. 1516.

PRODUCER'S WARRANTY SUPPLEMENT:

The technical and technological information that we publish about our products, especially advice on processing and their use, is based on our knowledge of the development and production of these coating materials, as well as on the today's over 25 years' experience with the application of these materials in practice. We collect empirical knowledge from using the coating materials, both under standard conditions corresponding to the current level of technology in the field, and from numerous unique applications. The application procedures presented in our product documentation are therefore indicative in the sense that their accuracy is usually influenced by processing conditions and other external influences, the diversity of products, the different nature and modification of the materials. All recommendations of BIOPOL paints, s. r. o. are therefore objectively non-binding to some extent. Professional erudition and experience of the user have the same weight for achieving the declared useful properties of products. Users are therefore responsible for the correct use of a particular product according to the instructions for use, as well as for the correct way of applying the coating system; therefore, they must always professionally evaluate all application and processing conditions that could affect the final quality of the surface treatment. To that end, we recommend that the user performs a test each time for specific working conditions and the type of surface to be applied. The producer reserves the right to change the product documentation (technical data sheets, methodical instructions, company regulations, safety data sheets) without prior notice. Therefore, make sure that you always follow the latest edition of the technical data sheet of the product or methodological instructions for its application in a model situation, as well as the regulations for safe handling of the product (especially SDS). This information, along with other documents, is available at the headquarters of our company at: Okrinek c.p. 29, 290 01 Podebrady, Tel.325653080,

325653122; Email: info@biopol.cz; and online at www.biopol.cz. All orders received by us are subject to our current "General Terms and Conditions o Business".



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