|  |  |
| --- | --- |
| **Characteristics:** | Colorless 2-component polyurethane varnish |
| **Description:** | Water-dilutable 2-component polyurethane varnish with high chemical and mechanical resistance.  |
| **Ingredients (general):** | Mixture based on polyurethane dispersion |
| **Use:** | Used for transparent coatings on plastic, metal (non-ferrous) and galvanized substrates, and wherever high mechanical and chemical resistance is required. The varnish is characterized by fast drying, hardness and non-stickiness, elasticity, and mechanical and chemical resistance. The varnish is UV resistant. |
| **Shades:** | The colorless varnish is available in a matt or glossy finish.  |
|  | Properties: | **Coating material:** | Hardener: | Hardened mixture: |
| Density (g/cm3): | 1.05 – 1.06 | 1.10 | 0.90 – 1.07 |
| Volume solid ONL (%): | 40-43 | 73 - 74 | 49 - 52 |
| Solids by weight (%): | 42-44 | 77 | 50 - 53 |
| VOC (volatile organic compounds) (kg/kg): | 0,11 | - | 0.12 – 0.13 |
| TOC (total organic carbon) (kg/kg): | 0,08 | - | 0.08 – 0.09 |
| Maximum permissible VOC content (g/l): | 140 |  |  |
| Max. VOC content of the product in ready-to-use state (g/l): | 138 |  |  |
| Water-thinnable coating categories. | And other multi-component reactive coating materials with a special function for specific purposes.  |
| Flammability/Flash Point (°C): | - |  |  |
| pH (at 20°C): | 7 – 8 7 -8 |
| Appearance/color: | Milky liquid |
| Gloss level:  | L60: 135-160 |
| **Hardness:**  | 5D at least 45% |
| **Adhesion:** | 0 |
| Viscosity/efflux time: | KU=80 – 120 F4=60 – 25 (s) |
| **Miscibility:** | Miscible with water |
| **Impact resistance:** | 90 cm |
| **Drying stage 1 (against dust):** | 2.5 hrs |
| **Drying stage 2 (to the touch):** | 3 hrs |
| **Drying stage 4 (dry):** | 4 hrs |
| **Chemical resistance.** | resistant to - weak acids, diesel oil, motor oil, hydrogen peroxide, xylene, butyl glycol |
| **Preparation of the substrate:** | The substrate must be dry, free from all mechanical and greasy impurities and old paint residues that are not adhering to the substrate. Adhesion to the substrate must be checked before first use. |
| **Conditions of application:** | The temperature of the air and the substrate during application and drying of the coating must not fall below +15 °C. If more than one coat is required, the interval between coatings must be at least 12 hours depending on the drying conditions. |
| **Dilution:** | The varnsih can be diluted with water according to the requirement for the resulting thickness and application method, but with no more than 20%. Always dilute after hardening. |
| **Hardening:** | DENAPUR LAK 100 and DENAPUR TUŽIDLO DES are mixed in a ratio of 100:30. The hardener is always added to the paint under constant stirring. A suitable mixing device is used for mixing (e.g. a drill with a stirrer); it is necessary to mix thoroughly. After mixing both compounds, the mixture is left to sit for 5 minutes. After thorough mixing, the consistency of the mixture is adjusted by adding water to reach the desired viscosity. |
| **Recommended method of application:** | Spraying by air, pneumatic, high pressure - Airless, Airmix |
| **Recommended coating system:** | 1 to 2 coats of DENAPUR LAK 100 on a thoroughly cleaned surface |
| **Application information:**  | The varnish can be dried at temperatures of 50 - 80 °C; at 60 °C the paint is dry in 1 hour.The pot life of a hardened mixture is max. 4 hrs. |
| **Coverage and recommended thickness:** | The approximate consumption is 0.03 - 0.06 kg/m2 at an optimum thickness of 30 - 60 µm MF for two coats.Thickness of wet layer: 30 - 60 µm MFThickness of dry layer: 10 - 20 µm SF, for undiluted paint 15 µm SF, when diluted with 20 parts water 10 µm SF |
| **Packaging:** | Plastic or sheet metal containers weighing 0.8 - 200 kg. |
| **Storage:** | Store in the original well-sealed container in a cool, dry and well-ventilated area at temperatures ranging from + 5 to + 25 °C. Do not freeze. Keep the mixture separate from drinks, food, feed and medicines. Keep out of reach of children.Shelf life at least 36 months from the date of production. The product must not freeze. |
| **Disposal of packaging and waste:** | Dispose of product residues and contaminated packaging as hazardous waste in accordance with applicable regulations. |
| **Safety and hygiene.** | Observe the safety data sheet when handling the product. Observe personal hygiene practices. In case of contact with skin, wash with soap and water. In case of contact with eyes, rinse with plenty of water. If swallowed, rinse mouth with water, do not induce vomiting. In case of health problems seek medical attention. |
| **Legislation, certificates, attests, other tested parameters:**  |  |