TIKKURILA OPTIVA SEMI MATT [20]

DESCRIPTION
The newest generation, waterborne, latex, acrylic-composite paint worked out with use of modern encapsulation technology which increase the barrier properties of painted surface. It is intended for decorative painting of walls and ceilings inside residential, office and public use buildings and in schools and health care premises (hospitals, schools, kinder-gardens), workhouses and production plants and also food industry without direct contact with food*. Forms beautiful, washable semi matt finish. Rich colors, the palette of colors over 13 thousand colors, is the best guide for your interior. Let yourself be inspired.

RECOMMENDED USES
Painting of gypsum boards, gypsum, cement-lime plasters, decorative painting of concrete substrates as well as for renovation of old coatings. Product may be used on small wood and metal surfaces, before application surface should be primed with suitable primer (Tikkurila Everal Primer, Tikkurila Everal Corrostop, Tikkurila Rostex Super Akva).

PRODUCT FEATURES
ENCAPSULATION TECHNOLOGY
1. Very good hiding power
2. Increased durability of the paint surface to stains and dirt such as: mayonnaise, liquid soup seasoning, chocolate sauce, butter, beer, oil**
3. Increased durability of the paint surface to dirt and dust
4. Decreased migration of salts effect (lower migration of salts in old buildings, churches, museums, etc.)

OPTIMAL AND DURABLE EFFECT
1. Uniform and easy to achieve paint surface structure.
2. Highest wet scrub durability – 1st class (PN-EN 13300)
3. Durability of colour in long period of time
4. Beautiful, deep matt finish.
5. Innovative tinting system Avatint.
6. Final effect with uniform semi-matt grade.

FOR HEALTH AND ENVIRONMENT
1. Product doesn’t contains volatile organic compound: zero VOC***
2. Ecological recipe and highest quality confirmed with Ecolabel certificate.
3. Recommendation from Polish Allergy Society (PTA), product is safe for people particularly sensitive and with susceptibility to allergy.
4. Raw materials used in paint production according to European parliament decree REACH, which aim i to assure high level of health and environment protection.
5. Paint fulfill the VOC requirement in BREAM International certificate system****
6. A+ class on account of low emission from the coat according to French norms
7. Product fulfill the requirement of LEED v4 „EQ Credit: Low Emitting Materials” both in range c content of volatile organic compound as well as in range of emission from the surface according to method accepted for investments realized outside USA.
8. Paint fulfill the requirement established by German Institute Building Technique (DIBt) and German Committee for health appraise of building materials (AgBB), and also fulfill requirement found in projec of Belgian royal decree establish the emission limits for buildings materials for interior use.
9. We don’t add formaldehyde in production process.

EASY APPLICATION
1. Non-dripping formula.

The above information is not intended to be exhaustive or complete. The information is based on laboratory tests and practical experience, and it is given to the best of our knowledge. The quality of the product is ensured by our operational system, based on the requirements of ISO 9001 and ISO 14001. As manufacturer we cannot control the conditions under which the product is being used or the many factors that have an effect on the use and application of the product. We disclaim liability for any damages caused by using the product against our instructions or for inappropriate purposes. We reserve the right to change the given information unilaterally without notice.
TIKKURILA OPTIVA SEMI MATT [20]

2. Very good adhesion to the surface.
3. Easy spread of paint.
4. Optimal drying time.

** It is recommended to remove the stains not later than 15 minutes after getting the dirt on the paint surface.
*** according to norm: PN-EN ISO 11890:2
**** acquaint Yourself with details in Producer Declaration concerning BREEAM International system.

The above information is not intended to be exhaustive or complete. The information is based on laboratory tests and practical experience, and it is given to the best of our knowledge. The quality of the product is ensured by our operational system, based on the requirements of ISO 9001 and ISO 14001. As manufacturer we cannot control the conditions under which the product is being used or the many factors that have an effect on the use and application of the product. We disclaim liability for any damages caused by using the product against our instructions or for inappropriate purposes. We reserve the right to change the given information unilaterally without notice.
TIKKURILA OPTIVA SEMI MATT [20]

<table>
<thead>
<tr>
<th>TECHNICAL DATA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Base paints</td>
<td>A BASE, C BASE</td>
</tr>
<tr>
<td>Colour Shades</td>
<td>Colours from colour cards Tikkurila Symphony, Tikkurila Deco Grey, NCS, RAL. Pallet of shades for over 13,000 colours.</td>
</tr>
<tr>
<td>Gloss</td>
<td>Semi-matt. According to norm: PN-EN 13300 gloss [20].</td>
</tr>
<tr>
<td>Binder</td>
<td>Styrene acrylate</td>
</tr>
<tr>
<td>Coverage</td>
<td>Up to 16 m²/l max. with one coat. The coverage depends to a large degree on such factors as absorbability, substrate texture, application method and colour.</td>
</tr>
<tr>
<td>Can sizes</td>
<td>A BASE: 0.9 l, 2.7 l, 9 l C BASE: 0.9 l, 2.7 l, 9 l</td>
</tr>
<tr>
<td>Thinner</td>
<td>Water. If necessary thin up to 5% with water.</td>
</tr>
<tr>
<td>Application method</td>
<td>Brush, roller, spray (nozzle: 415, pressure: 120-150 bar).</td>
</tr>
<tr>
<td>Drying time (23°C and 50% relative air humidity)</td>
<td>At temperature +23°C, relative air humidity 50% the paint needs approx. 4 hours to dry. The interval between application of subsequent coats must be at least 6 hours. In lower temperatures and higher humidity the time between the application of next coat might be longer.</td>
</tr>
<tr>
<td>Density (kg/l)</td>
<td>Base A – approx. 1.3, Base C – approx. 1.15 (depend on colour).</td>
</tr>
<tr>
<td>Wet scrub resistance</td>
<td>Highest – 1st class (according to norm: PN-EN 13300:2002). (PN-EN ISO 11998:2007P). In case of dirt on the surface for cleaning might be used water with delicate cleaning detergent.</td>
</tr>
<tr>
<td>Light resistance</td>
<td>Durability test for irradiation of the surface with UVC germicide lamps – the look of the surface and the shade didn’t change after 8 hrs. of irradiation.</td>
</tr>
<tr>
<td>Weight solid (%)</td>
<td>42-50</td>
</tr>
<tr>
<td>VOC</td>
<td>Cat. A/a. The product contains a minimal amount of volatile organic compounds below 1.5 g/l (below the applicable standard). Since 2010 permissible VOC content is less than 30 g/l.</td>
</tr>
<tr>
<td>Storage</td>
<td>The product must be transported and stored in containers, which protect it against influence of atmospheric conditions. The storage and transport temperature must be between +5°C and +25°C. Protect the paint against frost. Close tightly the packaging immediately after use. Tightly closed packaging should be stored in room with temperature not lower than +5°C and not higher than +25°C, protect from frost and direct sunlight.</td>
</tr>
<tr>
<td>Hygienic certificate</td>
<td>YES</td>
</tr>
</tbody>
</table>

The above information is not intended to be exhaustive or complete. The information is based on laboratory tests and practical experience, and it is given to the best of our knowledge. The quality of the product is ensured by our operational system, based on the requirements of ISO 9001 and ISO 14001. As manufacturer we cannot control the conditions under which the product is being used or the many factors that have an effect on the use and application of the product. We disclaim liability for any damages caused by using the product against our instructions or for inappropriate purposes. We reserve the right to change the given information unilaterally without notice.
TIKKURILA OPTIVA SEMI MATT [20]

APPLICATION INSTRUCTIONS

Application conditions
All surfaces intended for coating must be dry, air temperature may not be lower than +5°C and not higher then +25°C, relative air humidity below 80%.

Surface preparation
Unpainted surfaces:
New plaster and concrete substrates can be painted after 4 weeks of seasoning. Clean these surfaces from dust and dirt, smooth out irregularities and losses with putty. Gypsum boards, cardboards and putty may be painted after they are fully dry. In case when unevenness of the surface is considerable, the wall should be even with leveling mortar and afterwards apply on the whole surface smooth putty. In case of small unevenness you may apply smooth putty at once. The use of above mentioned mortars and putty should be done according to data sheets of these products. Machine plaster with visible glossy sinter surface should be sanded and clean from dust. Then apply one coat of Tikkurila Optiva Primer, as finishing coat apply two coats of Tikkurila Optiva Semi Matt [20].

Previously painted surfaces: Wash the surface before coating and remove grease and dirt and loose and flaking fragments of old coat. Sand glossy surfaces and smooth out irregularities and losses with putty. Paint with gloss grade: satin, semi-matt, semi-gloss and gloss should be sanded on the whole surface before final dusting. For sanding use sanding paper with grain 150 - 200. Prime the whole of substrate with Tikkurila Optiva Primer. Paint twice with the Tikkurila Optiva Semi Matt [20].

Surfaces painted with glue or lime paint:
Remove thoroughly the lime or glue paint. Clean the surfaces from dust and dirt, smooth out irregularities and losses with putty. Then apply one coat of Tikkurila Optiva Primer, as finishing coat apply twice the Tikkurila Optiva Semi Matt [20] paint. In case of loose substrate prime with Tikkurila Suprabilit.

Notice: It is recommended to check if the used putty is strong and stable surface – if after delicate hand wipe the putty is falling or leave the dust on hand then it means that the surface is loose and it has to be primed with Tikkurila Suprabilit.

Top coating
Before application thick sufficient amount of paint from one production batch to avoid possible colour difference. Before painting stir the paint thoroughly. Depending on substrate porosity apply 2 coats of Tikkurila Optiva Semi Matt [20] with brush, roller or spray. For colours of particularly weak hiding power (marked within the tinting system) it may be necessary to apply additional coats. In case of applying colours marked in tinting system as weakly hiding (LH) and intensive colours from C base, it is recommended to use priming paint Tikkurila Optiva Primer tinted to a colour close to the colour of finishing paint. The painting tape should be removed immediately after painting, before the paint will dry. It is recommended to use ANZA painting tools.

Notice: Full resistance properties to wet cleaning, according to PN-EN 13300, coating achievs after 28 days from the end of painting.

Cleaning of tools
Before washing tools should be thoroughly wiped in order to remove as much paint. Clean tools with water immediately after the completion of the work.

Environmental and waste disposal
Do not pour liquid waste into drains. Liquid waste should be destroyed according to the local regulations for hazardous waste. Destroy liquid waste according to the local regulations for hazardous waste.

HEALTH AND SAFETY LABELLING according to Regulation (EC) No. 1272/2008
After work and before breaks wash your hands thoroughly. If ventilation during spray application is insufficient use respirators or full face respiratory protective equipment, fitted with a filter absorbing dust P2 (II b). When painting wear appropriate protective clothing and gloves. Keep the paint out of reach of children. Keep the paint out of reach of children. After application of paint in closed rooms ventilate until disappearance of smell and after that time the rooms are suitable for use. This product contains a biocidal product for the preservation of the product during storage. Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (C(M)IT/MIT (3:1)), 1,2-benzisothiazol-3(2H)-one (BIT) and 2-methyl-2H-isothiazol-3-one (MIT). May produce an allergic reaction. The Material Safety Data Sheet is available on Customer’s request.