CHARACTERISTICS
Osakryl® OB is a vinyl acetate copolymer with alkylacrylates produced in an emulsion polymerization process in the presence of non-ionic emulsifying system based on polyvinyl alcohol. Product is designed for the formulation of decorative and protective paints mainly for interior use and plasters.

GENERAL PROPERTIES
- APEO free
- free of solvents

Product exhibit very good adhesion to various materials, especially cement, cement-limestone, wood, brick etc. Used as a binder in coatings promotes better wet-scrubbing resistance than poly(vinyl acetate).

BASIC PARAMETERS

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
<th>Values</th>
<th>Test methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>-</td>
<td>3.5±5.5</td>
<td>PN-EN 1245</td>
</tr>
<tr>
<td>solids content</td>
<td>%</td>
<td>50±2</td>
<td>PN-EN 827</td>
</tr>
<tr>
<td>viscosity by Brookfield RVT²)</td>
<td>mPa∙s</td>
<td>2000±7000</td>
<td>PN-ISO 2555</td>
</tr>
<tr>
<td>MFRT (minimal film forming temperature)</td>
<td>°C</td>
<td>5±7</td>
<td>PN-90/C-89415</td>
</tr>
<tr>
<td>Tg (glass transition)</td>
<td>°C</td>
<td>19±21</td>
<td>differential scanning calorimetry (DSC)</td>
</tr>
<tr>
<td>mean particle size</td>
<td>nm</td>
<td>400±500</td>
<td>photon correlation spectroscopy (PCS)</td>
</tr>
</tbody>
</table>

¹) rotors per minute: 20; rotor nr 5; temperature: 23ºC; after 5 minutes

APPLICATION
After evaporation of water in the temperature above 7°C Osakryl® OB forms a transparent film with a good adhesion to various porous materials, especially to such substrates as cement, cement-limestone and other porous substrates. Product is well dilutable with water and well miscible with inorganic fillers and pigments. In our experience Osakryl® OB can be used with all available raw materials designed for water-based products formulation. Osakryl® OB is miscible with other Winacet® type vinyl acetate homopolymers and copolymers dispersions. However we present below some information that may be helpful during formulating ready products.

Dispersing agents
According to our test results the best stability and good mechanical parameters show products based on Osakryl® OB with 0,1-0,2% by weight of Polifos as a wetting agent and 0,3-0,5% by weight of following dispersing agents: Hydropalat 1080, Hydropalat 5040, Metolat 514, Dispersene-P/80.

Defoamers
The best defoaming effect in high-filled systems based on Osakryl® OB can be achieved with 0,2% by weight of BYK 037 or Foamaster 50. In low-filled systems addition of 0,2% by weight of Dehydran SE 01 is recommended.

Rheology modifiers and thickeners
Osakryl® OB can be used with all available cellulose thickeners designed for water-based products formulation. The best results can be obtained in formulations based on Osakryl® OB and Bermocoll, Tylose or Natrosol. The addition of
xanthan gum e.g. Agocel V 500D and guar gum e.g. Agocel I 110D or Agocel I 115D is also recommended. Very good results can be achieved with DSX 1516 or DSX 3290 polyurethane thickeners.

**Coalescing agents**
Due to the fact that Osakryl® OB forms film in the temperature above 6°C it is not necessary to add coalescing agents particularly for interior applications. In order to improve some film forming properties Texanol can be used. 1% by weight of this coalescent counted on the dispersion amount is sufficient to lower the MFFT below 0°C.

**Fillers**
Osakryl® OB is well miscible with all mineral fillers. Very good whiteness and hiding power parameters can be obtained using Omyacarb 5VA and Omyacarb 2VA. For increasing whiteness and hiding power addition of precipitated aluminum and sodium silicate Sodasil P95 is recommended. Hiding power improvement can be achieved with the addition of Chinafill 830 or Dorkafil H. Mika SG or wollastonite Tremin 939-300 AST are recommended for products with increased wet scrubbing resistance.

**Biocides**
Osakryl® OB is protected against microbiological contamination. For final products based on Osakryl® OB protection "in can" we recommend addition of Preventol D8, Mirecide-M/90 or Acticide MBS. Sufficient dry film protection can be achieved with Preventol A14D, Mirecide-TF/458 or Mirecide-TF/495 ECO.

**Other additives**
For open-time prolongation in products based on Osakryl® OB we recommend addition of Ombrelub 730 or Loxanol DPN. As hydrophobing agents Agochem HP 120, Agochem HP 105, Wacker BS 1306 or Aquacer 539 can be used.

**PACKAGE AND TRANSPORTATION**
Acid resistant and heat insulated road tankers, IBC plastic containers or plastic drums with polyethylene bags inside. Package and transportation are not subject to regulations for hazardous materials transportation (ADR, RID). The other packages can also be used if previously agreed between the producer and a customer. Package must not deteriorate the product.

**STORAGE**
Store at temperature range from 5 to 35°C. Drums and containers should be stored in one layer. If stored in these conditions the product does not change its properties in the period of six (6) months from the date of production.

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This document is of an informative character. The information given herein is based on the present state of our knowledge and experience. It makes neither product properties nor qualitative parameters guarantee and cannot be used as a basis of any claims. The information provided cannot be used for any mixtures with any other substances. Product should be transported, stored and used in accordance with valid regulations and good occupational hygiene practice. Making use of the information as well as product application is beyond the producer control and determination of the safe conditions of use is the sole responsibility of a customer.