**DAITOSOL 5000STY**

**Formulation Concept**

**Chemical and physical properties**
- Appearance: milky white liquid
- Odor: characteristic
- Solid content = 50±2%
- Preservative: sodium dehydroacetate
- Tg ~ 7°C
- pH ~ 6.5-7.5
- Viscosity ~ 600 mPa.s

**Use guideline**
- Add at the end of the process at a temperature below 40°C
- Easy to use: low viscosity
- Ready for use: no prior polymer dispersion or neutralization required
- Very good water resistant film former which can be used to deliver active ingredient on the skin
- Is the polymer of choice for formulating waterproof products
- Use level: 0.1-60%

**Performance properties**

**Rub-off resistance**

Eyeliner formulations are applied on the skin and dried for 5 minutes. Wash with water and rub gentle.

**DAITOSOL 5000STY** imparts rub-off resistance to formulations.
Water resistance

The water resistance of the film is evaluated by immersion in water. The polymer is applied on a PET film (thickness 0.1 mm). After drying (1 hour), the film is immersed in water for 3 hours. The whitening of the film is an indication of the water resistance.

After 3 hours of immersion all the films except DAITOSOL 5000STY whiten. After drying the transparency is recovered for all the DAITOSOL products. Daitosol 5000STY absorbs the lowest amount of water and has the ability to significantly improve water resistance.

Applications

<table>
<thead>
<tr>
<th>EYELINERS</th>
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<tbody>
<tr>
<td>DKK 055 Felt pen eyeliner</td>
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<tr>
<td>DKE 53 Charcoal black eyeliner</td>
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<tr>
<th>MASCARA</th>
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<tr>
<td>DKK 035 Long lasting mascara - STY</td>
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<td>DKK 087 Ecofiber mascara</td>
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<tr>
<th>AQUEOUS NAIL PRODUCTS</th>
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<tr>
<td>DKE 162 Aqueous nail polish</td>
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<th>BODY PAINTS</th>
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<tr>
<td>DKK 089 Face and body paint</td>
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Safety and regulatory information

Product safety: A BCOP test showed that styrene/acrylates copolymer is non-irritating. A Human patch test did not demonstrate skin irritation for styrene/acrylates copolymer.

Material Safety Data Sheets are available for all DAIKO KASEI’s products.

REACH: All the ingredients, unless exempted, will be registered on May 2018.

For additional information

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