DeCAL 1201
Thickening and Rheological Control Additive in powder form

DeCAL 1201 is a powder grade rheological control additive. It can be used in a wide range of water-based systems. The product is designed to disperse and rapidly wet out in aqueous systems. Alternatively the product can be incorporated in powder blends and formulations.

Chemical Nature

DeCAL 1201 is a formulated product based on an acrylic polymer carried in powder form.

The polymer provides the rheological control effect through swelling of the high molecular weight polymer in the presence of water. Once the powder is dispersed in water the agglomerated powder reverts to its primary particle size providing efficient thickening.

Physical Properties

<table>
<thead>
<tr>
<th></th>
<th>White free flowing powder</th>
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<tbody>
<tr>
<td>Active Content</td>
<td>100%</td>
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<tr>
<td>Bulk Density</td>
<td>0.67 g/cm³</td>
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Applications

DeCAL 1201 can be used in a wide range of water-based adhesives and latex. The product is especially suited for adhesive systems.

Typical application includes:

- DIY adhesives
- conventional industrial adhesives, e.g., for the building industry
- pressure sensitive adhesives
- high speed machine adhesives
- silicone defoamers

DeCAL 1201 is effective over a wide pH range (pH 4-12).
**Incorporation in formulations:**

1) **Direct addition to latex or polymer emulsion.**
   Provided efficient mixing equipment is available, **DeCAL 1201** can be poured directly into the latex/emulsion. If this is not possible due to machinery limitations, localised thickening can be prevented by pre-dilution of the additives with a carrier solvent mixture (for example, aliphatic hydrocarbon) at a ratio of 1:2.

2) **Pre-gel formation.**
   **DeCAL 1201** can be diluted with water to form a stock solution if this method is preferred. The powder readily wets and disperses with moderate agitation.

The amount of **DeCAL 1201** required for optimum performance should be determined by trials covering a concentration range.

**Recommended concentration:**

- **Adhesives & latex:** 0.5 – 1.0% **DeCAL 1201**  
  (Based on total formulation)

- **pre-gel / stock solutions:** 3.0% **DeCAL 1201** in water.

**Safety and Handling:**

**DeCAL 1201** should be handled in accordance with good industrial practice. Detailed information is proved in the Material Safety Data Sheet.

**DeCAL 1201** is hygroscopic and it is recommended to store the product in dry conditions and seal well any opened packages after use.

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We hope this information will be of value and if necessary we will be glad to offer additional technical advice. Please note that all our information is given in good faith, we can assume no responsibility for any liability incurred. Data and results should be confirmed by the Buyer by testing the product under its intended conditions of use.

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