



## DeCAL 2045

### Hydrophobic Dispersant for Aqueous Systems

**DeCAL 2045** is a hydrophobic dispersant used to disperse inorganic pigments and fillers in water borne systems. It is especially recommended for reactive pigment grades and is also ideally suited for systems whereby improvements in water resistance are required, such as aqueous paints, coatings and adhesives.

#### 1. Typical Properties.

Chemical Nature :	Sodium salt of an acrylic copolymer in water.
Appearance :	Hazy straw coloured liquid.
pH :	7.5
Solids Content:	30%
Viscosity at 25°C :	1000mPa.s (Brookfield RVT@20 rpm)
Density at 20°C :	1.2 g cm <sup>-3</sup>

#### 2. Applications.

**(i) Decorative Paints and Coatings** – **DeCAL 2045** is an ideal dispersing agent for water borne high gloss coatings containing polypropylene glycol and other glycols used to promote wet edge time and film coalescence. Improvements in colour development and colour acceptance are also seen when using **DeCAL 2045**.

**(ii) Adhesives & Latex Compounds** – **DeCAL 2045** is used to disperse fillers and pigments in many products such as tile adhesives, grouts, fillers and water based adhesives and glues.

### 3. Incorporation :

**DeCAL 2045** should be thoroughly mixed with water before adding pigments and fillers to the system using high shear mixers. Using this method very high pigment loading can be achieved.

For optimum dispersing efficiency the pH of the system must be alkaline and preferably above pH 8.

The dosage required is typically between 0.5% - 2.0% calculated as supplied on weight of pigments and fillers.

In common with other dispersing agents, because of batch to batch variations of the demands of a specific pigment it is recommended that the formulator uses 1.5 – 2.0 times the determined optimum level of dispersing agent.

#### **Optimum Dispersant Levels - (% Active Dispersant on Dry Pigment/Filler)**

<u>PIGMENT/FILLER SLURRY</u>	<u>DeCAL 2045</u>
TITANIUM DIOXIDE (77%)	0.30
KAOLIN (67%)	0.35
GROUND CALCIUM CARBONATE (80%)	0.07

**4. Safety & Handling:** **DeCAL 2045** should be handled in accordance with good industrial practice. Detailed information is provided in Safety Data Sheet.

**5. Storage :** Although **DeCAL 2045** is freeze thaw stable, it is recommended to store the product at temperatures above 5°C to enable easy handling of the product.

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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