## PAT-ADD DA 450

# **Product Data Sheet**

Rev 00 January 2017



### **Product Features**

PAT-ADD DA 450 is a polymeric dispersing agent for waterborne industrial coatings, pigment dispersions and printing inks. PAT-ADD DA 450 is a highly effective dispersant for inorganic and moderately polar surface treated organic pigments, including carbon blacks.

#### Main benefits are:

- Enables high pigment loadings, minimizes mill-base viscosity
- Suitable for making glycol free pigment concentrates
- Optimizes color development
- Strong prevention of pigment flocculation, floating, flooding, and pigment settling
- Excellent performance in industrial coating formulations

### **Physical Characteristics:**

Appearance : Clear colorless to pale yellow liquid

**Viscosity @ 25°C/77°F** : <200 cP

Specific gravity @ 25°C/77°F : 1.050 (Approx.)
Composition : Polyelectrolyte

pH(1% Solution in DM Water) : 7.0-8.0Solvents : Water Solids content (120°C/1 Hr.) :  $40.0 \pm 2.0\%$ 

### **Properties:**

Polymeric dispersant PAT-ADD DA 450 shows strong interaction and high affinity for charged surfaces, such as inorganic pigments and polar surface treated organic pigments. Once adsorbed, the multifunctional PAT-ADD DA 450 molecules are unlikely to be desorbed, even in diluted conditions.

These unique properties explain the excellent performance of PAT-ADD DA 450 in industrial paints and highly loaded pigment concentrates.

### **Dosage & Addition**

The optimal amount of PAT-ADD DA 450 is system related, but generally is between 0.5 and 2.0% PAT-ADD DA 450 on the total weight of paint formulation. For printing inks, dosages between 1.0 to 4.0% are suggested. The dosage is related to the offered pigment surface area, with organic pigments and high surface carbon blacks at the higher side of the recommendation.

<sup>&</sup>quot;Physical parameters indicated here in product data sheet are typical properties and not specification limits or range."

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The product is best added to the mill-base before the pigments. For use in pigment concentrates (PC) higher levels are suggested; 3 to 10% PAT-ADD DA 450 on total weight of the PC.

The optimum concentration to be used depends on the individual requirements and conditions.

### **End Use Application**

PAT-ADD DA 450 is designed for use in a wide range of waterborne industrial paints, such as acrylics, stoving systems, 2-packs, epoxies, polyesters, etc. Additionally, PAT-ADD DA 450 is recommended as dispersing agent in highly loaded, resin free pigment concentrates.

### **Shelf life**

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The product has shelf life of 24 months from the date of manufacturing; packed in un opened original containers as shipped by Patcham when stored in frost free warehouse.

### **Storage and transportation**

The product may solidify below +1 °C (33.8 °F). Heat to 20 °C (68 °F) and stir.

### **Safety and Handling**

For information on handling, storage and safety please refer to the information from the Material Safety Data Sheet (SDS).

### **Packing size**

Plastic container: - 25.0 kgs, 200.0 kgs, 1000.0 kgs.

#### Disclaimer:

While every effort is made to provide accurate and complete test results for The PATCHAM ADDITIVES, various data may vary depending upon different raw materials, test procedures and test conditions. The accuracy, reliability, or totality of the results are not guaranteed or warranted in any way. PATCHAM FZC and its representatives disclaim liability of any kind whatsoever, including liability for quality, performance and fitness for a particular purpose arising out of the use, or inability to use the test results.