# PAT-ADD DA 401

# **Product Data Sheet**

Rev 01 April 2018



### **Product Features**

PAT-ADD DA 401 is a polymeric dispersing additive for waterborne paints, pigment dispersions and printing inks. PAT-ADD DA 401 is a highly effective dispersant for inorganic and moderately polar pigments, including carbon blacks, in aqueous systems

### Main benefits are:

- Enables high pigment loadings, minimizes mill-base viscosity
- Optimizes color development
- Strong prevention of pigment flocculation, floating, flooding, and pigment settling

# **Physical Characteristics:**

Appearance : Clear Yellow liquid

 Viscosity @ 25°C/77°F
 : 500 - 4000 cP

 Specific gravity @ 25°C/77°F
 : 1.030 - 1.070

Polarity : Anionic

**Composition** : Polyelectrolyte

 Solvents
 : Water

 %Solids content (120°C/1hr)
 : 28.0 ± 2.0 %

### **Properties:**

Polymeric dispersant PAT-ADD DA 401 exhibits strong interaction and adsorption onto charged surfaces of inorganic pigments and polar treated organic pigments. Once adsorbed the multi-functional PAT-ADD DA 401 molecules are unlikely to be desorbed, even in diluted conditions. PAT-ADD DA 401 improves the performance of industrial paints and highly loaded pigment concentrates.

# **Dosage & Addition**

The optimal amount of PAT-ADD DA 401 is system related, but is generally between 0.5 and 2.0% 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 pigment surface area, with organic pigments and high surface carbon blacks at the higher side of the recommendation.

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 401 on total weight of the PC.

<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 optimum concentration to be used depends on the individual formulation and conditions.

### **End Use Application**

PAT-ADD DA 401 is designed for use in a wide range of waterborne industrial paints, such as acrylics, stoving systems, 2-pack systems, epoxies, polyesters etc. Moreover, PAT-ADD DA 401 is recommended as dispersing additive in highly loaded pigment concentrates.

### **Shelf life**

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**

Drum: - 200.0 kgs, Can: - 25.0 kgs, IBCs: - 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.