

PAT-ADD DA 787

Product Data Sheet

Rev 01

April 2018



Product Features

PAT-ADD DA 787 is an emulsifier and stabilizer of water in organic solvent borne paints. Aqueous solutions of PAT-ADD DA 787 are admixed into the paint under mild conditions. The product provides impressively long term stability without phase separation, pigment flocculation, gloss reduction or adverse effects on drying time.

PAT-ADD DA 787 enables reduction in VOC content for solvent borne paints by replacing thinner with water.

Main benefits are:

- Enabling paint cost reduction with water replacement
- Enabling reduction VOC level
- Maintaining standard paint manufacturing conditions
- Supports colorant acceptance
- Excellent dry film performance, such as high gloss, opacity, adhesion

Physical Characteristics:

Appearance	: Clear Amber liquid
Viscosity @ 25°C	: 200 - 600 cP
Specific gravity @ 25°C	: 1.090 – 1.120
Polarity	: Non-ionic
%Solids content(120°C/1hr)	: 94 - 100%
Composition	: polyethylene glycol mono-ester

“Physical parameters indicated here in product data sheet are typical properties and not specification limits or range.”

Properties:

PAT-ADD DA 787 is a unique emulsifier for incorporation of water in organic solvent borne paints and varnishes.

The product is readily dissolved in water, at low shear. Contrary to the use of classic emulsifiers, side effects such foaming is kept to a minimum. Furthermore, it ensures rapid incorporation of water into the non-aqueous paint and resistant to phase separation, during storage of the diluted paint system.

As opposed to conventionally used additives for water incorporation, no special manufacturing condition is required. However, in order to maintain optimal balance between hydrophobic and hydrophilic ratio, it is advised to avoid the use of hydrophilic pigment dispersing agents, such as soya lecithin, but use instead Pat-Add DA 707.

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Excellent shelf life stability is demonstrated in PAT-ADD DA 787, low risk of phase separation, pigment flocculation or gloss reduction, due to the presence of water.

PAT-ADD DA 787 can be used in a wide range of alkyd resin based paint systems, including paints based on styrenated alkyd resins.

Dosage & Addition

PAT-ADD DA 787 is preferably dissolved in the amount of water for dilution purposes. Typically, a quantity of about 20% water containing 2-3% PAT-ADD DA 787- is mixed into the paint system, this leaving about 0,4 to 0,6% PAT-ADD DA 787 in the total quantity of final, water-diluted paint. So the commonly preferred procedure is adding 2 - 3% PAT-ADD DA 787 to water, mixing gently for a few minutes, avoiding air-inclusion. When homogeneous, add this solution into the paint, under typical paint-let-down mixing conditions.

As the addition of water, typically results in a modest viscosity increase, it is preferred to maintain initial paint viscosity (so before the aqueous solution of PAT-ADD DA 787 is being added) at a low level. Practical experiences has shown paint viscosity of around 40-50 KU as being optimal conditions for dilution with water.

Applicability of PAT-ADD DA 787 is resin and system related and best determined individually for each case. The optimum concentration depending on the individual formulation and conditions.

End Use Application

Pat-Add DA 787 is recommended for alkyd enamels, specifically for low, medium and modified type alkyds.

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, stored in frost free warehouse.

Storage, transportation, 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: - 220.0 kgs, Can: - 25.0 kgs, IBCs: - 1100.0 kgs.

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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.

