

# TECHNICAL DATA SHEET

# SYNAQUA® 2090

Alkyd Emulsion

### **PRODUCT APPLICATION DETAILS**

SYNAQUA® 2090 is a short oil alkyd emulsion designed to be formulated without Cobalt drier. SYNAQUA® 2090 has been developped for the formulation of high gloss and semi-gloss wall and trim paints.

 ${\sf SYNAQUA}^{\circ}$  2090 is formulated without alkylphenolethoxylates, and is ammonia-, solvent- and plasticizer- free.

### **SALES SPECIFICATIONS**

	CHARACTERISTICS	METHODS
Solid content (125°C)	49 - 51 %	ISO 3251
рН	6.0 - 8.0	ISO 976
Viscosity (Brookfield DVE, spindle1, 10rpm) (23°C)	300 max mPa.s	ISO 2555

### OTHER CHARACTERISTICS<sup>1</sup>

	CHARACTERISTICS	METHODS
Appearance	White milky liquid	
Solvent	Water	
Density (23°C)	1.07 g/ml	ISO 2811
Fatty acid type	Linoleic rich	
Fatty acid content	40 %	
Average particle size	300 max nm	ISO 13321

<sup>&</sup>lt;sup>1</sup>The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications

### **MARKETS**

### **Coatings & Inks**

- Architectural Coating
  - Interior Wall

## **PERFORMANCE BENEFITS**

- Cobalt-free
- Extremely low VOC content (no requirement for coalescing solvents)
- High gloss potential
- Low yellowing
- Good application characteristics



# SYNAQUA® 2090

### **FORMULATION GUIDELINES**

### DRIERS

SYNAQUA® 2090 is designed to be used in a paint formulation without any drier.

Unlike solvent-based alkyds no antiskinning agent is required when formulating with SYNAQUA® 2090.

### RHEOLOGY

Rheology and viscosity can be controlled by using associative thickeners such as HEUR thickeners, e.g. Coapur™ XS 22 <sup>(1)</sup>, Coapur™ 830 W <sup>(1)</sup>, hydrophobically modified polyether thickeners, e.g. Aquaflow® NHS 300 <sup>(2)</sup>, Aquaflow® NLS 205 <sup>(2)</sup>.

### **COMPATIBILITY**

SYNAQUA® 2090 may be used in combination with (styrene-)acrylic emulsions. However, the compatibility has to be carefully checked in each system.

### **OTHER ADDITIVES**

Defoamers such as Byk°-022 <sup>(3)</sup>, Byk°-028, Byk°-093 <sup>(3)</sup> Surfynol° MD20 <sup>(4)</sup>, Surfynol° DF-58 <sup>(4)</sup>, FoamStar° ST 2438 <sup>(5)</sup>, Tego° Airex 902W <sup>(6)</sup> can be used without adversely affecting paint performance.

The correct choice of the dispersing agent is essential to ensure the maximum performance from the alkyd emulsion. Dispersing agents such as Coadis™ BR 85 <sup>(1)</sup>, for example or Disperbyk®-190 <sup>(3)</sup> can be used. It is not recommended to use SYNAQUA® 2090 in the millbase.

Notes: (1) Coatex, (2) Ashland Specialty Ingredients, (3) Byk, (4) Air Products, (5) BASF, (6) Evonik Tego Chemie GmbH

### **PRODUCT SAFETY**

Please refer to the corresponding Safety Data Sheet.

### STORAGE AND HANDLING

SYNAQUA® 2090 should be stored indoors in the original, unopened and undamaged container, in a dry place at storage temperatures between 5°C and 30°C. Exposure to direct sunlight should be avoided. The product is protected to prevent any microbial deterioration during normal conditions of storage but care should be taken to avoid accidental contamination during subsequent handling and processing. In the above mentioned storage conditions the shelf life of the resin will be from the shipping date.

Shelf Life Durability (Months): 6

**Headquarter: Arkema France** 420, rue d'Estienne d'Orves 92705 Colombes Cedex – France T +33 (0)1 49 00 80 80

