

# SYNAQUA® 2090

ARCHITECTURAL COATINGS

ARKEMA COATING RESINS

## Product Application details

SYNAQUA® 2090 is a short oil alkyd emulsion designed to be formulated without Cobalt drier. SYNAQUA® 2090 has been developed for the formulation of high gloss and semi-gloss wall and trim paints. SYNAQUA® 2090 is formulated without alkylphenoethoxylates, and is ammonia-, solvent- and plasticizer- free.

## Performance Benefits

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

## Polymer Type

- Alkyd Emulsion

## Sales Specifications

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

## Other Characteristics<sup>1</sup>

Appearance	White milky liquid
Volatile	Water
Density / Specific Gravity at 23°C, g/ml (ISO 2811)	1.07
Type of fatty acid	Linoleic rich
Fatty Acid content, %	40
Average Particle size, nm (ISO 13321)	300 max

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

## 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 (1), Coapur™ 830 W (1), hydrophobically modified polyether thickeners, e.g. Aquaflow® NHS 300 (2), Aquaflow® NLS 205 (2).

### 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 (3), Byk®-028, Byk®-093 (3) Surfynol® MD20 (4), Surfynol® DF-58 (4), FoamStar® A 38 (5), Tego® Airex 902W (6) 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 (1), for example or

Disperbyk®-190 (3) 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) Cognis, (6) Evonik Tego Chemie GmbH*

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## Product Safety

Please refer to the corresponding Safety Data Sheet.

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## Storage & 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 6 months from the shipping date

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See SDS for Health & Safety Considerations.

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