SYNAQUA® 2070

ARCHITECTURAL COATINGS — ARKEMA COATING RESINS

Product Application details

SYNAQUA® 2070 is a medium oil alkyd emulsion designed for use in decorative paints.
SYNAQUA® 2070 has been developed primarily for use in interior undercoats formulations. However, it is also suitable for other applications such as matt paints, exterior primers for wood, woodstains or metal and corrosion resistant primers.
SYNAQUA® 2070 is designed to get coatings with similar application properties to solvent based alkyds but with low VOC in the finished product, with an improved wet-edge time.
SYNAQUA® 2070 does not contain any alkylphenolethoxylates nor amines.

Performance Benefits

- Extremely low VOC content (no requirement for coalescing solvents)
- Good penetration into porous substrates
- Good adhesion
- Good flexibility

Polymer Type

- Alkyd Emulsion

Sales Specifications

Solid Content at 125°C, % (ISO 3251)	52 - 54
pH (ISO 976)	5.5 - 8.5
Viscosity at 23°C, mPa.s (Brookfield DVE, spindle1, 10rpm) (ISO 2555)	50 - 500

Other Characteristics[1]

Appearance	White milky liquid
Volatile	Water
Density / Specific Gravity at 23°C, g/ml (ISO 2811)	1.05
Type of fatty acid	Linoleic rich
Fatty Acid content, %	50
Average Particle size, nm (ISO 13321)	300 max

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

Formulation Guidelines

DRIERS

It is recommended to use driers that have been especially developed for water based coatings.
A suitable drier for SYNAQUA® 2070 can be a plurimetallic drier, for instance Additol® VXW 6206 (1) at 1,5% on resin solid or the use of 0.1-0.15% of cobalt alone on resin solids.
Unlike solvent-based alkyds no antiskinning agent is required when formulating with SYNAQUA® 2070.

RHEOLOGY

Rheology and viscosity can be controlled by using cellulose ethers.
Associative thickeners such as HEUR thickeners, e.g. Coapur™ XS 22 (2), Coapur™ 830W (2), hydrophobically modified polyether thickeners, e.g. Aquaflow® NHS 300 (3), Aquaflow® NLS 205 (3) can also be used, either alone or in combination with the cellulose ethers.

COMPATIBILITY

SYNAQUA® 2070 can be used in combination with acrylic dispersions. However, the compatibility has to be carefully checked in each system.
SYNAQUA® 2070 is compatible with all commonly used pigments and extenders.

OTHER ADDITIVES

Commercially available dispersing agents such as the sodium salts of polyacrylic acid or Coadis™ BR 85 (2) or Disperbyk®-190 (4) can be used.
It is not recommended to use SYNAQUA® 2070 in the millbase.

Notes: (1) Allnex, (2) Coatex, (3) Ashland Specialty Ingredients, (4) Byk

SYNAQUA®

Product Safety	Please refer to the corresponding Safety Data Sheet.
Storage & Handling	SYNAQUA® 2070 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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