Printing & Packaging

Technical Data Sheet

Joncryl® 646

We create chemistry

Product Description

Joncryl® 646 is a high molecular weight, acrylic colloidal emulsion for corrugated ink applications.

Key Features & Benefits

- Cost-effective letdown vehicle
- Effective thickening agent

Chemical Composition

Styrene acrylic colloidal emulsion

Properties

Typical Properties

Appearance	opaque emulsion
Non-volatile at 145°C (2g, 30 min)	~ 40.5%
pH at 25°C	~ 6.5
Acid number (2g sample)	~ 138
Molecular weight (Mw)	100,000
Viscosity at 25°C (Brookfield #4 LVF spindle, 12 rpm)	45 cps
Density at 25°C	1.07 g/cm³
MFFT	< 7°C
Tg	30°C
Freeze-thaw stable	No
Total VOC	< 0.005% wt

These typical values should not be interpreted as specifications.

Applications

Joncryl® 646 is a high molecular weight, colloidal emulsion designed to minimize the cost of inks for corrugated board. The balance between the molecular weight and the composition of this emulsion results in the ability to maintain viscosity of corrugated inks with a minimal amount of polymer.

Joncryl® 646 performs as a very efficient letdown vehicle by allowing the formulator to maximize the percentage of water in the ink, while maintaining viscosity and printing properties.

Joncryl® 646 is recommended for applications such as:

- Printing inks for flexographic or gravure applications

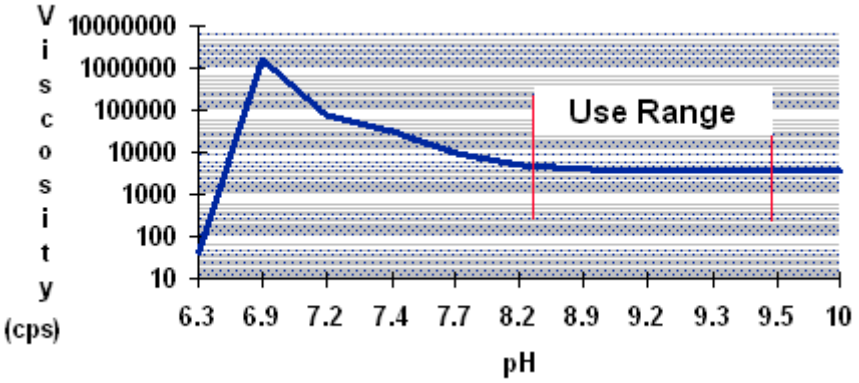
Processing

Since Joncryl® 646 is supplied in the acidic form, it must be neutralized with ammonium hydroxide or organic amines and diluted before subsequent use in ink formulations.

Because of its high viscosity profile, the formulation of varnishes at 10% polymer solids is highly recommended.

The following graph represents the variation in viscosity of Joncryl® 646 as a function of pH. Note that in the recommended pH range of 8.2 – 9.5, the viscosity is very stable.

Joncryl® 646 Neutralization Study



Safety

General

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State, and Local health and safety regulations, thorough ventilation of the workplace, good skin care, and wearing of protective goggles.

Safety Data Sheet

All safety information is provided in the Safety Data Sheet for Joncryl® 646.

Important

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