

COLLOIDAL DISPERSION

INTRODUCTION

VANCRYL 450 is a high solids colloidal dispersion that can be neutralized with ammonia or other alkaline materials to provide an outstanding vehicle for corrugated printing ink applications. This product, at 40% solids, reduces the cost in ink systems based on pre-neutralized colloidal acrylics.

VANCRYL 450 exhibits excellent black pigment grinding, and high drink in corrugated systems. This polymer, when neutralized with ammonia at 10% solids in water, has a viscosity of 150 cP, or about 40 seconds on a # 2 Zahn cup. It provides excellent transfer and printing at this low, economical solids level.

Neutralization can be easily accomplished by a simple mixing of 100 parts polymer wet, 95 parts water, and 5 parts ammonia. This mixture produces a 20% solids colloidal emulsion with a viscosity of 6000 to 9000 cP. It can be used in black pigment dispersions as well as color letdowns for corrugated inks.

This product is also an effective thickener for other formulations based on acrylic and styrenated acrylic polymers.

TYPICAL PROPERTIES

Acid number, mg KOH/g	136
Density, lbs/gal	8.70
Flashpoint	Non-combustible
Grit rating, ppm	< 25
Molecular weight, Mw	420000
Non-volatile matter, %	40
pH	5.8
Tg, °C	40
Tmff, °C	< 0
Viscosity, at 25°C, mPa.s	30
VOC, wt. %	< 0.25

KEY PERFORMANCE PROPERTIES

- Higher jetness black dispersions
- Economy of high drink, low solids
- Excellent pigment compatibility
- Ease of neutralization
- Very low VOC content