

# VANCRYL® 989

Acrylic Emulsion

June 2017



## INTRODUCTION

VANCRYL 989 is a high Tg acrylic emulsion for the graphic arts industry. Excellent gloss and fast drying rates can be obtained by utilizing VANCRYL 989 in inks and coatings. It is suitable for both flexographic and gravure printing on paper substrates.

VANCRYL 989 has excellent compatibility with pigment dispersions and alcohols. Inks formulated with this product have good transfer, printability, and resolubility. Because it is a hard polymer, VANCRYL 989 can also be formulated as a high gloss over print varnish with very good heat, water, oil, and scuff resistance.

## KEY PERFORMANCE PROPERTIES

- High gloss and holdout on paper substrates
- Fast drying rate
- Good heat, water, oil, and scuff resistance
- Excellent compatibility with pigment dispersions and alcohols

## TYPICAL PROPERTIES

	VALUE
Acid number, mg KOH/g	50
Density, lbs/gal	8.8
Flashpoint	Non-combustible
Freeze-thaw stability (5 cycles)	Pass
Grit rating, ppm	<100
Molecular weight, M <sub>w</sub>	>200000
Non-volatile matter, %	50
pH	8.6
T <sub>g</sub> , °C	84
T <sub>mff</sub> , °C	>70
Viscosity, cP	1100
VOC, wt. %	<0.5

## STARTING POINT FORMULATIONS

High Gloss Overprint Varnish	%
VANCRYL 68-S <sup>(1)</sup> (30% solution)	32.0
Michem® Emulsion 32535 <sup>(2)</sup>	5.0
VANCRYL 989	58.0
KNOCKDOWN® 155 <sup>(1)</sup> defoamer	0.2
Water	4.8

pH	8.3
Viscosity, Zahn #2, sec	28
Solids, %	40.5

G/S Cyan Blue Ink Base Grind	%
VANCRYL 68-S	29.0
G/S Cyan blue pigment	35.0
KNOCKDOWN 155 defoamer	0.5
Water	35.5

Finished Ink	%
Base Grind	35.0
VANCRYL 68-S	12.0
VANCRYL 989	44.5
Michem Emulsion 32535	3.5
Water	5.0

pH	8.4
#2 Zahn Viscosity, sec	5
Solids, %	42.5

(1) Product of allnex

(2) Product of Michelman Inc.

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