

### RESIN SOLUTION

### INTRODUCTION

VANCRYL® 68-S resin solution is an aqueous solution of VANCRYL® 68 acrylic resin, with ammonia used to affect the solution.

VANCRYL® 68-S provides outstanding pigment wetting along with the viscosity stability needed for aqueous gravure and flexographic inks. The transfer properties and hold-out characteristics of inks prepared with this resin solution are excellent.

In coatings, VANCRYL® 68-S provides high gloss, scuff resistance and hardness. VANCRYL® 68-S is compatible with most acrylic vehicles and other vehicles such as maleic resins.

VANCRYL® 68-S is effective as a protective colloid in the production of styrene-acrylic copolymer emulsions.

### KEY PERFORMANCE PROPERTIES

- Outstanding pigment wetting
- Excellent transfer
- Good hold-out
- Low foam
- High gloss
- Compatible with most vehicles

### TYPICAL PROPERTIES

Appearance	Clear solution
Density, lbs/gal	8.6
Flashpoint	Non-combustible
Freeze-thaw stability	Stable
Molecular weight, Mw	20000
Non-Volatiles, %	30
pH	8.8
Tg, °C	57
Viscosity, 25°C, mPa.s	3000
Viscosity, reduced solids, 25°C, mPa.s	100
VOC, wt. %	<0.5

### STARTING POINT FORMULATIONS

Flexographic Ink Base Grind	%
Phthalo blue pigment	32.0
VANCRYL® 68-S resin solution <sup>(1)</sup>	32.0
Water	35.0
KNOCKDOWN® 155 <sup>(1)</sup> defoamer	1.0

Finished Ink	%
Base Grind	29.0
VANCRYL® 989 emulsion	58.0
Michem® Emulsion 32535 <sup>(2)</sup>	8.0
Water	3.0
Diethylene glycol	1.0
KNOCKDOWN® 155 defoamer	0.7
Ammonia	0.3

pH	8.6
Viscosity (#2 Zahn), s	33

High Gloss Coating	%
VANCRYL® 989 emulsion	60.0
VANCRYL® 68-S resin solution	25.0
Michem® Emulsion 32535	5.0
KNOCKDOWN® 155 defoamer	1.0
Water	9.0

pH	8.5
Viscosity (#2 Zahn), s	30

<sup>(1)</sup> Product of allnex

<sup>(2)</sup> Product of Michelman Inc.