

## *Key Features & Benefits*

- ***Color development and gloss***
- ***Viscosity stability***
- ***High pigment concentrations at low viscosity***

## **HIGH PERFORMANCE PIGMENT DISPERSION RESIN**

### *General Information*

#### *Typical Physical Characteristics*

Appearance	Clear flakes
Non-Volatile, %	98.9
Density at 25°C, g/cm <sup>3</sup>	1.16
Acid Number, NV	220
Molecular Weight, Mw	16,000
Tg, °C	88
Softening Point (ring and ball), °C	155
Total VOC, % weight	1.1

These typical values should not be interpreted as specifications.

**Joncryl® HPD 696** is a high molecular weight acrylic resin specifically designed to improve the color development and gloss of pigment dispersion without compromising ink stability. Dispersions made with this product approach the quality of chip dispersion.

## STARTING POINT FORMULATIONS:

### Solution of Joncryl HPD 696:

Since **Joncryl HPD 696** is supplied in solid flake form, it must be dissolved and neutralized to form a solution before use, except in the manufacture of pigmented chips.

<b>Joncryl HPD 696</b>	33.5
Ammonia, 28%	8.4
Water	58.1
TOTAL	100.0

### Physical Characteristics

Appearance	Clear solution
pH	8.6
Non-Volatile, %	33.5
Viscosity, cps*	5,500
Weight per Gallon, lbs	9.1
Total VOC, % weight	0.36

\*Brookfield LVF #4 spindle, 60 rpm, 25°C.

### Mixing Procedures:

1. Add hot water (130 - 150°F), co-solvents (if applicable), and ammonia or other desired neutralizing agent in a covered vessel fitted with high speed dispersing agitation.
2. Start agitation and add **Joncryl HPD 696** slow enough to prevent the formation of lumps or balls. Agitate at medium speed until dissolved.
3. Cool and check pH. Adjust pH with ammonia or amine to required specification.

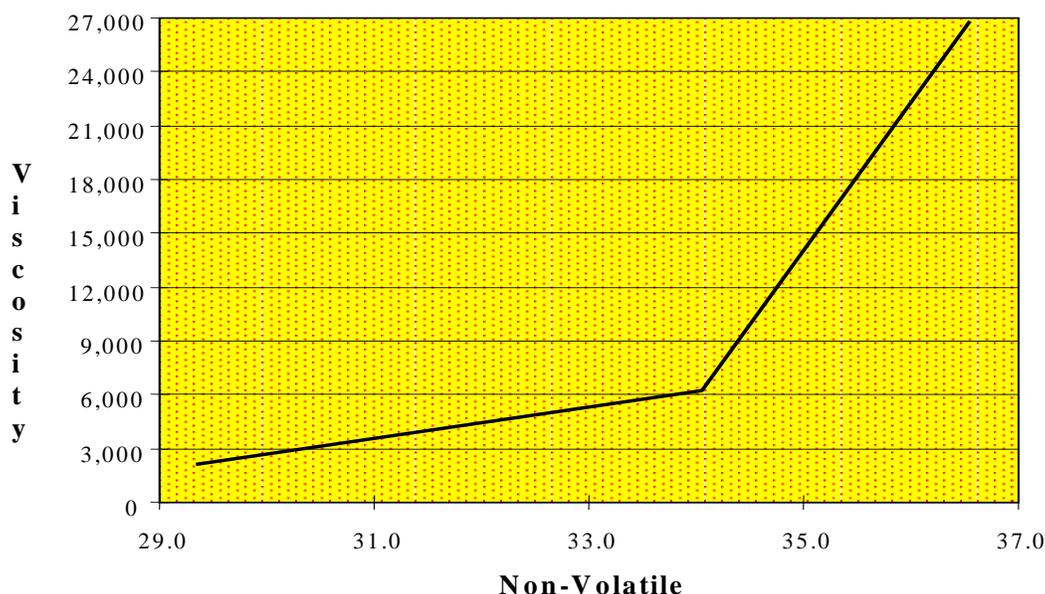
Precautions must be taken in order to prevent the loss of ammonia during the resin cutting procedure. Significant loss of ammonia may result in low pH and undissolved resin in the solution.

### Pigment Dispersions:

**Joncryl HPD 696** provides improved pigment wetting, color strength, and gloss compared to conventional dispersion resins. This allows the manufacture of high solids, low viscosity pigment dispersions that have excellent rheology, flow, and stability.

Dispersions with pigment loadings of 35 – 40% can often be achieved with this product. A pigment-to-binder ratio of 4:1 will generally yield good viscosity and shock stability.

## Viscosity Profile of Joncryl® HPD 696



The statements in the product literature and label are guidelines only. Users should test this product in advance to verify suitability for particular uses. BASF Corporation neither makes nor authorizes to be made any express or implied representation or warranty with regard to this product concerning the performance, use, fitness for particular purpose, suitability for use on any surface or merchantability of this product, whether used alone or in combination with other products. The furnishing by us of information and products either as experimental samples or by sales, contains no recommendations respecting the use of these products or the lack of infringement of any patent nor does it grant a license under any patent owned by our company. BASF assumes no liability for any damage of any kind regardless of cause, including negligence.

Joncryl® is a registered trademark of BASF Corporation.

©2008 BASF Corporation, Wyandotte, MI 48192. All rights reserved.

### U.S. and Canada

BASF Resins  
1609 Biddle Avenue  
Wyandotte, Michigan 48192

Phone: 1-800-231-7868  
Fax: 1-800-437-3266  
americas@basf.com

### Mexico

BASF Mexicana, S.A. de C.V.  
Av. Insurgentes Sur # 975  
Col. Ciudad de los Deportes  
C.P. 03710  
Mexico, D.F.  
Phone : (52-55) 53-25-27-87  
(52-55) 53-25-26-87  
Fax: (52-55) 56-11-48-97