

Helping Make
Products Better™



JONCRYL® 537

Key Features & Benefits

- Alkali and Detergent Resistance
- Adhesion Vinyl and Polyolefins
- Good Balance of Resistance and Resolubility

ALKALI RESISTANT ACRYLIC POLYMER EMULSION

General Information

Typical Physical Characteristics

Appearance	Translucent Emulsion
pH	9.0
Non-Volatile (%)	46
Viscosity (cps)*	150
Density (g/cm ³ , 25 °C)	1.05
Tg (°C)	44
Acid Number (NV)	40
Molecular Weight (Mw)	>200,000
Freeze/Thaw Stable	Yes
Minimum Film Forming Temp. (°C)	42
Total VOC (wt. %)	0.8

These typical values should not be interpreted as specifications

JONCRYL® 537 is a Rheology Controlled (RC), non-film forming, acrylic emulsion that can be coalesced to form an alkali and detergent resistant film for inks and coatings. In addition, the unique properties of this polymer include gloss and adhesion to flexible substrates such as vinyl and polystyrene when formulated with the proper coalescing solvents.

starting point formulations:

Overprint Varnishes:

JONCRYL 537 is an essential component of overprint varnishes that require high gloss, alkali, detergent, and water resistance.

	Alkali Resistant Overprint Varnishes	
	E-series glycol ether	P-series glycol ether
JONCRYL 537	83.6	80.6
(EB) Ethylene Glycol Monobutyl Ether	6.5	--
(DB) Diethylene Glycol Monobutyl Ether	1.9	--
(PnB) Propylene Glycol n-Butyl Ether	--	6.3
(DPnB) Dipropylene Glycol n-Butyl Ether	--	1.8
Wetting Agent	0.4	0.4
Dry Wax	1.0	1.0
Defoamer	0.1	0.1
Water	<u>6.5</u>	<u>9.8</u>
Total	100.0	100.0

NV%	39.5	38.1
Initial Viscosity, cps	260	240
pH	9.1	9.2

Glycol ethers and crosslinkers such as zinc oxide solution should be added slowly while mixing to avoid shocking the system.

Finished Inks Recommendations:

- Surfactant based pigment dispersions should be utilized to make alkaline resistant inks. Dispersions utilizing JONCRYL 56 or other acrylic resins may also be used in inks let down with JONCRYL 537, however the alkaline resistance will be adversely affected.
- The addition of a small amount of amine such as monoethanolamine (MEA) or dimethylethanolamine (DMEA) will increase resolubility on the press and promote release from the anilox cells but will also have an impact on final alkali and water resistance.

Solvent Compatibility:

Solvent	9:1 Dilution*		3:1 Dilution**	
	Initial	7 Days	Initial	7 Days
Water	35	35	20	15
Isopropanol	225	210	80	80
Normal Propanol	350	325	125	120
Diethylene Glycol Monoethyl Ether (Carbitol)	110	105	80	85
Ethylene Glycol Monobutyl Ether (EB)	630	780	260	280
Diethylene Glycol Monobutyl Ether (DB)	355	375	140	155
Dipropylene Glycol Methyl Ether (DPM)	110	120	90	90
Dipropylene Glycol Propyl Ether (DPnP)	525	445	1360	1240
Propylene Glycol n-Butyl Ether (PnB)	3000	2700	8400	8000
Dipropylene Glycol n-Butyl Ether (DPnB)	1720	2600	2500	gel
Tripropylene Methyl Ether (TPM)	150	160	165	150
Ethylene Glycol Monopropyl Ether (EP)	280	290	210	200
N-Methyl-2-Pyrrolidone	80	90	55	55
Texanol	1480	1160	gel	gel

* 90 parts JONCRYL 537 / 10 parts solvent

** 75 parts JONCRYL 537 / 25 parts solvent

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.

©2006 BASF Corporation, Sturtevant, WI 53177-0902. 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

Europe, Africa and
Middle East
BASF Resins B.V.
Innovatielaan 1
8466 SN Nijehaske
P.O. Box 390 8440
A J Heerenveen
The Netherlands
Phone: 31-513-619619
Fax: 31-513-619600
resins@basf.com

Japan
Johnson Polymer Corp.
Kanagawa Science Park
West-505
2-1, Sakado 3-Chome,
Takatsu-ku
Kawasaki-shi,
Kanagawa/Japan
213-0012
Phone: 81-44-829-1366
Fax: 81-44-829-1361

Asia/Pacific Rim
Johnson Polymer Ltd.
Block 213, Henderson Ind.
Park #04-11 Henderson
Road
Singapore 159533
Phone: +65-6272-2338
Fax: +65-6271-7956

Latin and South America
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