

# Joncryl<sup>®</sup> FLX 5220

<b>Product Description</b>	Joncryl FLX 5220 is a polyurethane-acrylic hybrid dispersion for use in lamination inks for medium to high duty film applications, including retort packaging.
<b>Key Features &amp; Benefits</b>	<ul style="list-style-type: none"><li>- Excellent lamination bond strength on a broad range of substrates</li><li>- Very good printability and resolubility</li><li>- Good compatibility with pigment concentrates and letdown varnishes</li><li>- Swiss List compliant* for food packaging</li></ul>
<b>Chemical Composition</b>	Polyurethane–acrylic hybrid dispersion

## Properties

<b>Typical Properties</b>	Appearance		translucent emulsion
	Molecular weight (Mw)		> 200,000
	Non-volatile	%	43
	pH		8.0
	Viscosity at 25°C (Brookfield #3 LVF, 30 rpm)	cps	200
	Density at 25°C	g/cm <sup>3</sup>	1.05
	MFFT	°C	< 5
	Freeze-thaw stable		No
	Total VOC	% wt	0.2

These typical values should not be interpreted as specifications.

## Application

Joncryl FLX 5220 is specially designed for use in water-based lamination inks for medium to high duty applications, including retort packaging. An ink formulation based on Joncryl FLX 5220, printed on BOPP or PET but also to OPA and subsequently laminated to LDPE, provides lamination structures with high lamination bond strengths. These structures are very suitable to be used for food, snacks, candy packaging, deepfreeze, coffee, and fatty products like cheese and cold cuts packaging.

Inks based on Joncryl FLX 5220 have very good printability, which shows itself in a very nice lay on different substrates. The pigment paste compatibility of Joncryl FLX 5220 is very good, making it a versatile vehicle that can be incorporated into many ink formulations.

Joncryl FLX 5220 is recommended for applications such as:

- Printing inks for flexographic or gravure applications

\* All components of Joncryl FLX 5220 are listed on Swiss List Annex 6, List A and B. Contact the BASF product regulatory group for further information.

**Formulation Guidelines**

Joncryl FLX 5220 can be used in conjunction with resin or surfactant based commercially available pigment dispersions and is compatible with standard ink-making materials.

**Starting Point Formulation**

The following starting point formulations are recommended for initial evaluations of Joncryl FLX 5220. Additional optimization of the formulations may be required to achieve desired results for specific applications.

**Blue Ink**

<b>61.5</b>	<b>parts</b>	<b>Joncryl® FLX 5220</b>
<b>35.0</b>	parts	pigment concentrate PB 15:3
<b>0.5</b>	parts	FoamStar® SI 2213
<b>3.0</b>	parts	IPA
<b>100.0</b>	parts	<b>Total</b>

**White Ink**

<b>56.5</b>	<b>parts</b>	<b>Joncryl® FLX 5220</b>
<b>40.0</b>	parts	pigment concentrate PW 6
<b>0.5</b>	parts	FoamStar® SI 2213
<b>3.0</b>	parts	n-propanol
<b>100.0</b>	parts	<b>Total</b>

---

**Safety****General**

The usual safety precautions when handling chemicals must be observed. These include the measures described in Federal, State, and Local health and safety regulations, thorough ventilation of the workplace, good skin care, and wearing of protective goggles.

**Safety Data Sheet**

All safety information is provided in the Safety Data Sheet for Joncryl FLX 5220.

---

**Storage**

Please refer to the "Handling and Storage of Polymer Dispersions" brochure.

---

## Important

The descriptions, designs, and data contained herein are presented for your guidance only. Because there are many factors under your control which may affect processing or application/use it is necessary for you to make appropriate tests to determine whether the product is suitable for your particular purpose prior to use. **NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, OR DATA MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, DATA OR DESIGNS PROVIDED BE PRESUMED TO BE A PART OF OUR TERMS AND CONDITIONS OF SALE.** Further, you expressly understand and agree that the descriptions, designs, and data furnished by BASF hereunder are given gratis and BASF assumes no obligation or liability for same or results obtained from use thereof, all such being given to you and accepted by you at your risk.

*Joncryl and FoamStar are registered trademarks of BASF Group.*

© BASF Corporation, 2019



BASF Corporation is fully committed to the Responsible Care® initiative in the USA, Canada, and Mexico.

For more information on Responsible Care® go to:

U.S.: [www.basf.us/responsiblecare\\_usa](http://www.basf.us/responsiblecare_usa)

Canada: [www.basf.us/responsiblecare\\_canada](http://www.basf.us/responsiblecare_canada)

México: [www.basf.us/responsiblecare\\_mexico](http://www.basf.us/responsiblecare_mexico)

BASF Corporation  
Dispersions and Resins  
11501 Steele Creek Road  
Charlotte, North Carolina 28273  
Phone: (800) 251 – 0612  
Email: [CustCare-Charlotte@basf.com](mailto:CustCare-Charlotte@basf.com)  
Email: [edtech-info@basf.com](mailto:edtech-info@basf.com)  
[www.basf.us/dpsolutions](http://www.basf.us/dpsolutions)