



## Ryudye<sup>®</sup>-W Binder FP-180      Low-Temperature Foaming Binder

### [Main Application]

Ready-mixed printing agent for low temperature foam printing on woven or knit fabrics.

### [Storage Stability]

Stored in a cool and dry place for one year, recommend to store at temperature between 0~40°C.

### [Environmental Criteria]

1. Fulfill Formaldehyde criteria of Japan Law 112 (Showa 49-34);
2. Fulfill APEO criteria of EU Directive (2003/53/EC);
3. Fulfill Phthalate criteria of EU Directive (2005/84/EC);
4. Fulfill Heavy Metal Criteria of EN-71 Part3:1994;
5. Not detected PVC (Test Method: FTIR);
6. Fulfill AZO criteria (not exceed 20mg/kg) of China Directive (GB18401-2010);
7. Fulfill SVHC (2014 Edition) of EU Reach.

### [Typical Formulation]

	White printing	Color printing
Ryudye <sup>®</sup> -W Colors	-	0-10
Ryudye <sup>®</sup> -W Binder FP-180	50-100	50-100
Ryudye <sup>®</sup> -W KN White P-75	50-0	-
Ryudye <sup>®</sup> -W KN Clear P-76	-	50-0
Ryudye <sup>®</sup> -W Fixer	X	X
Total (Weight %)	100+X	100+X

### [Printing Process]

Printing → Pre-drying (< 70 °C, 1Min) → Heat Treatment (110-120 °C, 1-2Mins)

### [Fastness Test]

1. Washing fastness test (60 °C×1Hr × 4times) : 3.0 - 4.0 Grade
2. Rubbing fastness test (JIS L-0849, 100Rounds / 3Mins) : 3.0 - 4.0 Grade

Note: Fastness Grade from 1.0 to 5.0, Grade 5.0 is the best.

### [Matters Needing Attention ]

1. In order to ensure excellent fastness, we advise adding the right amount of Ryudye<sup>®</sup>-W Fixer J-52 (1-3%, Long-time limiting, 24Hrs);
2. Recommended screen mesh from 800 to 1,200;
3. In order to prevent drying too quickly and cause block up the screen when the humidity is too low (e.g. Autumn or Winter), you can add 1-3% wetting agent (Ryudye<sup>®</sup>-W Assister 502);
4. All matters in this instructions is obtained based on the standard test method, so in order to avoid any difference, the user must test according to their own use method and requirements before the product used for production.