

# 5110 SPECIFICATION

Developed foil quality for metal die and glass application (by Roll on).

<b>I. FIELDS OF APPLICATION</b>	Cosmetic containers, spirit and fragrances glass & overprinting on inks (pad printing or screen printing)
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<b>II. SUITABLE PLASTICS</b>	PP, PE (with FB), PS, ABS, Epoxy screen-printing glass (recommended with CER INKART5000 series), Surlyn
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### III. BASIC PROPERTY

Property	Grade
Release Property	C
Definition	B to C
Overstampability	D
Overprintability	B
Stamping by Rubber Die	C
Stamping by Metal Die	A
Stamping by Rubber Roll	B (for glass application only)

<b>LEGEND</b>
A (Excellent)
B (Good)
C (Fair)
D (Poor)

\*In case of mat and dark colors, the definition will be worse up to 1 grade.

### IV. STAMPING CONDITIONS

Metal Die	Silicone Rubber Roll
More than 160°C 0.6 sec. on up-and-down stamping	More than 190°C 4m/min. on peripheral rolling on

## V. COMPATIBILITY AND PHYSICAL RESISTANCE

Testing Item	Testing Conditions	Evaluation Standards	Evaluation
1 Abrasion Resistance	Rubbing by Japanese paper with the 500g load.	Until bare surface is visible	300 strokes
2 Solvent Resistance	Rubbing with a force of 1kg/1cm <sup>2</sup> with IPA denatured alcohol	Until bare surface is visible	100 strokes
3 Alcohol Resistance	Dipping in 99.5% EtoH for 4 hrs. at 50°C 95 RH	No abnormality	OK
4 Water Resistance	Dipping in running water 48 hrs.	No abnormality	OK
5 Fingernail Scratching	Scratch lightly with fingernail	Scratches must not be conspicuous	OK
6 Pencil Hardness	Min. HB Uni-pencil with force of 1kg	Must be no marks made	OK
7 Adherence	Test on cross-cut surface (to make 100 cells) by using Nichiban 24mm wide tape.	No separation	OK
8 Adherence Endurance	Same as performing above adherence test after dipping in water for 1 hour at room temp.	No separation	OK
9 Heat Resistance	168 hrs. at 60°C	No abnormality	OK
10 Cold Resistance	168 hrs. at -20°C	No abnormality	OK
11 Humidity Resistance A	168 hrs. at 40°C, 95% RH	No abnormality	OK
12 Humidity Resistance B	120 hrs. at 60°C, 95% RH	No abnormality	OK
13 Thermal Shock Resistance	4 cycles of 1 hr. at -20°C and 1 hr. at +60°C	No abnormality	OK
14 Artificial Perspiration Resistance	Application of JIS acidic perspiration for 168 hrs. at +60°C	No abnormality	OK

### Storage Conditions

Our foil can be used one during one year after date of production (which is defined by the batch number). They can be easily stored, in their original packing. They have to be preserved for direct light and stored at stable temperature between 5°C and 30° with less than 60% humidity. It's compulsory to avoid any thermic chocks in order to preserve the different layers of the foil (glue, varnish, etc...)

\*The result may depend on the stamping conditions and the kind of the substrate.

The data presented is the result of extensive research. However, since the actual conditions under which this foil is used is beyond our control; adjustments to these recommendations may be required to achieve optimum results. Test results represented are internal quality audits for this product and not imply warranty of any kind.

### CONTACT