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# ORIBAIN BPW 6627

### 1. Features

ORIBAIN BPW 6627 is a one-component water-based emulsion type acrylic adhesive for strong adhesive labels.

It has low viscosity and is suitable for coating with gravure and die coater.

# 2. Specification

|                      | Product name         |  |
|----------------------|----------------------|--|
|                      | < BPW 6627 >         |  |
| Appearance           | Pale yellow emulsion |  |
| Non-volatile content | 61.0±1.0 %           |  |
| Viscosity            | 600±100 mPa∙s        |  |
| рН                   | 8.0 ± 0.5            |  |

Viscometer: Brookfield, spindle No. 3 , 60 rpm at 25°C



# 3. Performance

| Test Item: Measurement                    |            |     |             | Value |
|---|------------|-----|-------------|-------|
| Adhesion at room temperature [N/25mm]     | 23°C-50%RH | SUS | Immediately | 13.0  |
|   |            |     | 24hrs       | 13.5  |
|   |            | PE  | Immediately | 10.0  |
|   |            |     | 24hrs       | 12.0  |
|   |            | PP  | Immediately | 12.0  |
| Adhesion at low temperature [N/25mm]      |            |     | 24hrs       | 13.1  |
|   | -10°C      | SUS | Immediately | 5.0   |
|   |            |     | 24hrs       | 8.6   |
|   |            | PE  | Immediately | 3.6   |
|   |            |     | 24hrs       | 6.7   |
| Holding Power [mm/70,000sec] 40°C-1Kg SUS |            |     | 20000       |       |
| Ball Tack (J. Dow Method) [#]             |            |     |             |       |

### < Sample Preparation Conditions >

| Release paper  | : | Commercial paper release liner       |
|----------------|---|--------------------------------------|
| Substrate      | : | Commercial synthetic paper           |
| Coating method | : | Transfer coating                     |
| Coating weight | : | approx. 20g/m² (dry)                 |
| Drying:        | : | 105°C for 90 seconds in hot air oven |
| Aging          | : | 23°C-50%RH for 1 day after coating   |



## 4. Handling and Storage

Storage : Store indoors at 5-40°C. Avoid direct sunlight and freezing.

Handling : Use protective equipment such as rubber gloves to prevent direct skin contact with the sample.

<sup>t</sup> The general description, recommended uses, application data and statements in the product literature and label are guidelines only. Users should test this product in advance to verify suitability for particular uses.

# 5. General Test Methods

### < Adhesion at Room Temperature >

Leave the sample and adherend under the test conditions for at least 30 minutes. Then, apply the sample to the adherend and press with a 2kg roller back and forth once before measuring. Measure Peel strength using a tensile tester, pulling at 180 degrees at 300 mm/min.

| Sample size     | : | 25mm width × 100mm length               |
|-----------------|---|---|
| Adherend        | : | SUS plate, PE plate, PP plate           |
| immediately     | : | Measure immediately after applying      |
| 24hrs           | : | Measure after 24hrs in test conditions. |
| Test conditions | : | 23°C-50%RH                              |

### < Adhesion at Low Temperature >

Leave the sample and adherend for more than 60 minutes under -10°C, then take them out in the environment of 23°C-50%RH immediately, adhere together with a 2Kg roll once back and forth, and measure after leaving it under -10°C for a specified time. Use a tensile testing machine, peel off at 300mm/min in the 180-degree direction, and display its strength.

| Sample size     | : | 25mm width × 100mm length               |
|-----------------|---|---|
| Adherend        | : | SUS plate, PE plate                     |
| immediately     | : | Measure immediately after applying      |
| 24hrs           | : | Measure after 24hrs in test conditions. |
| Test conditions | : | -10°C                                   |



#### < Holding Power >

Apply the sample to the adherend and press with a 2kg roller back and forth once at 23°C and 50% RH. Leave the applied sample for 20 minutes under test conditions, then apply a 1kg load and measure the time to fall or the creep distance.

| Sample size <sup>°</sup> | : | 25mm width × 100mm length |
|--------------------------|---|---------------------------|
| Test area                | : | 25mm width × 25mm length  |
| Adherend                 | : | SUS plate                 |
| Test conditions          | : | 40°C (no humidity)        |
| weight                   | : | 1Kg                       |

#### < Ball Tack (J. Dow Method) >

Roll a steel ball (1/32-32/32 inches) down a 30-degree inclined plane with a 10cm approach run onto a 10cm section of the adhesive surface. The ball size that stops near the center of the adhesive surface is recorded as the result. Conduct the test under conditions of 23°C and 50% RH.