

ORIBAIN BPW 6495

1. Features

ORIBAIN BPW 6495 is a one-component, water-based, emulsion-type acrylic adhesive. This adhesive exhibits excellent anchoring properties and high adhesive strength for rubber-based foam.

2. Specification

| | |
|-----------------------------|--|
| | Product name < BPW 6495 > |
| Appearance | Milky yellowish emulsion |
| Non-volatile content | 60.0±1.0 % |
| Viscosity | 15000±2000 mPa·s |
| pH | 7.7 ± 0.5 |

Viscometer: Brookfield, spindle No. 4 , 12 rpm at 25°C

3. Performance

| | | | | |
|---|----------------|-----|-----------------------|-----------------------|
| Substrate | | | | EPDM (10t) |
| core material | | | | Non-woven fabric core |
| Actual coating amount [g/ m ² · dry] | | | | 59.0 |
| Peel strength [N/25mm] | 23°C- 50%RH | PP | 20 mins | 11.2 Z |
| | | | 20 mins* (post-aging) | 8.3 Z |
| Holding strength [falling time/sec] | 23°C-500g | SUS | | 1.5mm/24hrs |
| 80°C Peel length under constant load | | | PP | 1550 |
| Initial Tack [N] | | | | 11.1 |
| Curved Surface Adhesion [Peel mm/24hrs] | 80°C | PP | 20 mins | 4.0 |
| | | | 20 mins* (post-aging) | 3.8 |

* Z: Zipping * Post-aging: Sheet aged at 60°C for 7 days.

< Sample Preparation Conditions >

Substrate : EPDM foam (10t)
 Core material : Non-woven fabric
 Coating amount : 60 ± 5g/m² (dry)
 Drying: : 100°C for 180 seconds in hot air oven
 Aging : After coating, 23°C-50%RH, more than 24 hours

| Substrate | | | EPDM (6t) | CR rubber (6t) | |
|---|-----------------|-----|-----------------------|----------------|-------|
| Actual coating amount [g/ m ² · dry] | | | 58.7 | | |
| Peel strength [N/25mm] | 23°C-50%RH | SUS | 20 mins | 7.4 | 12.3 |
| | | | 20 mins* (post-aging) | 4.6 | 7.6 |
| | | PP | 20 mins | 7.0 Z | 9.2 Z |
| | | | 20 mins* (post-aging) | 4.3 | 5.6 |
| Holding strength [falling time/sec] | 23°C-24hrs-500g | SUS | 1.2 | 1.5 | |
| Softening point [°C] | | | SUS | 64.6 | 105.4 |
| Initial Tack [N] | | | 7.9 | 10.0 | |
| Curved Surface Adhesion [Peel mm/24hrs] | 80°C-24hrs | PP | 20 mins | 0.0 | 0.0 |
| | | | 20 mins* (post-aging) | 0.0 | 0.0 |

* Z: Zipping * Post-aging: Sheet aged at 60°C for 7 days.

< Sample Preparation Conditions >

- Substrate : EPDM foam (6t), CR rubber foam
- Coating amount : 60 ± 5g/m² (dry)
- Drying: : 100°C for 180 seconds in hot air oven
- Aging : After coating, 23°C-50%RH, more than 24 hours

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.

* 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

< Peel strength >

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, PP plate |
| immediately | : | Measure immediately after applying |
| Test conditions | : | 23°C-50%RH |

< 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 | : | 25mm width × 100mm length |
| Test area | : | 25mm width × 25mm length |
| Adherend | : | SUS plate |
| Test conditions | : | 23°C-50%RH |
| weight | : | 500g |

< Peel Length under Constant Load >

Place the sample and the adherend under measurement conditions for more than 30 minutes, bond them, and measure after pressing once back and forth with a 2Kg roller. After leaving for 24 hours under measurement conditions, apply a load and display the creep state or falling time over a certain period under 80°C.

| | | |
|-----------------|---|---------------------------|
| Sample size | : | 25mm width × 100mm length |
| test area | : | 25mm width × 80mm length |
| Adherend | : | PP plate |
| Test conditions | : | 80°C |
| weight | : | 100g |

<Softening Point>

Place the sample and the adherent under measurement conditions, press once back and forth with a 5Kg roller. After 24 hours under 23°C-50%RH conditions, apply a 310g load under 38°C conditions, leave for 15 minutes, then raise the temperature by 3°C each time for 5 minutes until the sample falls, showing that temperature.

| | | |
|--------------|---|---------------------------|
| Sample size | : | 25mm width × 100mm length |
| Adheren area | : | 25mm width × 25mm length |
| Adherend | : | SUS plate |
| weight | : | 310g |

<Initial Tack>

Place the sample on a stainless plate with the adhesive side up, attach it to the lower chuck of a tensile tester. Suspend a 10g weight (size: measurement surface: 1cm²) on the upper chuck, adhere to the adhesive surface by its own weight for 10 seconds, then peel it off at a speed of 300mm/min to display its strength. Wipe the weight with ethyl acetate for each measurement.20分後 = after 20min

| | | |
|-----------------|---|---------------------------|
| Sample size | : | 25mm width × 100mm length |
| Test conditions | : | 23°C-50%RH |

<Curved Surface Adhesion>

Place the sample on the adherent under measurement conditions, press once, and leave for 24 hours under 80°C conditions to measure the floating peeling.

| | | |
|-------------|---|---------------------------|
| Sample size | : | 25mm width × 180mm length |
| Adherend | : | 80mmφ PP cylindrical |