

Protects from Water

WP grade

PET Support Series
WP-24P/32P/40P

Test results

... IPX7-compliant
... IPX4-compliant

○: No leakage; ×: Some leakage

| | Unit | WP | | | | | | |
|--------------|-------------------|-----|---|-----|---|-----|---|---|
| | | 24P | | 32P | | 40P | | |
| Test results | Compression ratio | 70% | ○ | ○ | ○ | ○ | ○ | ○ |
| | | 60% | × | ○ | ○ | ○ | ○ | ○ |
| | | 50% | — | ○ | × | ○ | ○ | ○ |
| | | 40% | — | ○ | — | ○ | × | ○ |
| | | 30% | — | ○ | — | ○ | — | ○ |
| | | 20% | — | ○ | — | ○ | — | ○ |
| | | 10% | — | ○ | — | ○ | — | ○ |

Waterproof testing (IPX7 compliance)

Test method: RIC original

The sample in the diagram was immersed in water to depth of 1m at each compression ratio. After being left for 60 minutes, a visual check was made to confirm the presence or lack of water leakage into the sample.

Waterproof testing (IPX4 compliance)

Test method: RIC original

The sample in the diagram was sprinkled with water at a rate of 0.10L/min for each compression state (10 to 70% compression). A visual check was then made to confirm the presence or lack of water leakage.

Test sample (0.5 mm thick with adhesive tape attached)



Test sample (0.5 mm thick)



Microcellular Polymer Sheets

PORON®

PORON micro-cell polymer sheeting is a highly functional micro-cell urethane foam possessing a high-density, extremely minute, uniform cell structure. It resists deterioration even after long stretches of use and can fulfill an important role in all areas of manufacturing as a sealing material, cushioning material, gap-correction material, or foot pad rubber.

* Foam Materials of INOAC CORPORATION JAPAN

Waterproof Series



PORON® Waterproof WP-24P/32P/40P

This material offers waterproof features with IPX7-equivalent compliance, as well as preserving the high functionality of **PORON®** with such properties as high sealability, impact absorption, and dimensional stability.

Characteristics



Waterproof

Water-repellency has been added using our own in-house formulation technology, offering IPX7-equivalent test (RIC original) compliance levels.



High sealability

This material's waterproof qualities are strengthened by its high sealability.



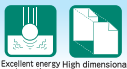
Low compression set

This material offers excellent shape retention with its extremely low compression set.



No migration and low outgassing

This material uses no plasticizers or sulfur, so contact faults are of minimal concern.



Impact absorption and dimensional stability

This material maintains the same basic characteristics as standard **PORON®**.

Product data

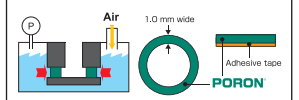
◆Water-proof test Equivalent to a water depth of 20 m

| Unit | WP | | | SR-S | | |
|------|-----|-----|-----|------|-----|-----|
| | 24P | 32P | 40P | 24P | 32P | 40P |
| 70% | ○ | ○ | ○ | × | × | ○ |
| 60% | × | ○ | ○ | - | - | × |
| 50% | - | × | ○ | - | - | - |
| 40% | - | - | × | - | - | - |

Test method:

The sample was placed as shown in the diagram, and pressure was applied by adding water. It was removed 30 minutes later, and a visual check was made to confirm the presence or lack of water leakage.
Pressure applied: 0.2 MPa (equivalent to a water depth of 20 m)

Test sample (0.5 mm thick with adhesive tape attached)



○:leakage;×:Some leakage

◆Water absorption measurements

| | Thickness (mm) | Water absorption(%) |
|----------|----------------|---------------------|
| WP-24P | 0.5 | 13.0 |
| WP-32P | 0.5 | 7.6 |
| WP-40P | 0.5 | 2.2 |
| SR-S-24P | 0.5 | 47.3 |
| SR-S-32P | 0.5 | 43.9 |
| SR-S-40P | 0.5 | 30.7 |
| PE foam | 0.5 | 18.9 |

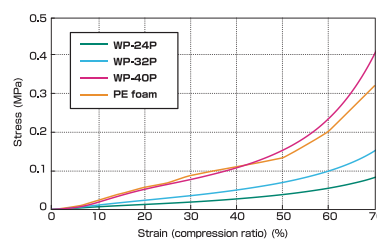
Test method (conforming to JIS K 7209):

After the sample was dried (50±2°C x 24 h), it was immersed in 100 mm of water for 24 hours at room temperature conditions (23±2°C). The weight of the sample was measured before and after testing, and the ratio of weight increase was calculated.

Test sample (50 × 50 mm)



◆Stress-strain curves



Test conditions:

The sample was compressed at a compression speed of 1 mm per minute, and the stress-strain curve (S-S curve) was measured.

Physical Properties and Product Availability

◆Physical Properties

| Item/unit | Product type | WP-24P | WP-32P | WP-40P | Test method |
|-----------------|--------------------------|-------------|-------------|-------------|-------------|
| Density | kg/m ³ | 240 | 320 | 400 | JIS K 6401 |
| 25% CLD | MPa(kg/cm ²) | 0.02 (0.20) | 0.05 (0.50) | 0.07 (0.70) | JIS K 6254 |
| Compression set | % | 4.2 | 4.9 | 5.7 | JIS K 6401 |

Note: The figures all indicate representative values.

◆Product Availability

| Thickness (mm) | Width (mm) | Length (m) | WP-24P | WP-32P | WP-40P |
|----------------|------------|------------|--------|--------|--------|
| 0.3 | 500 | 100 | | ○ | ○ |
| 0.5 | 500 | 100 | □ | ○ | ○ |
| 1.0 | 500 | 50 | ○ | ○ | ○ |
| 1.5 | 500 | 50 | □ | ○ | □ |
| 2.0 | 500 | 50 | □ | ○ | ○ |

Note: ○...Semi-standard products (1 roll); □... Available products (500 m²)

DK
GMPack
Good material & packaging

SUPPORTING INDUSTRY PRODUCTS AND PACKAGING

20, Lot H2 11, 12 XN1A road, Hoa Phu Ward, Thu Dau Mot City, Binh Duong Province, Vietnam
0901 659 078 (Mr. Vinh) - info@gmpack.net - gmpack.net

