

# #1 Coating Technology in The World Molecule Gradient Layer (MGL)<sup>TM</sup> Technology

# The PET careered super thin double-coated tape

# 400Pseries

#### **Features**

- 1) High processable performance by very thin PETfilm
- 2 Superior adhesion to various adherends for plastics and metal
- 3 Under the high temperature high humidity, have superior performance.
- 4 Excellent repulsion resistance, also preventing lifting on curved foams
- ⑤VOCSolvent-free: not use solvent of the guideline for indoor air concentrations set by Health, Labor and Welfare Ministry. (\*):(Volatile Organic Compound)

#### **Application**

• For fixing modules such as mobile phone.

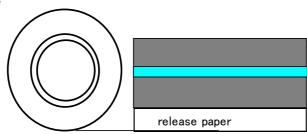
For fixing LCD-modules

For fixing key-sheets

For fixing radiation of heat sheet and the insulation sheet.

For fixing name-plate

#### **Structure**



Acrylic adhesive PET film Acrylic adhesive

#### **Properties**

#### 1. Properties

Product name	Thickness (mm)	Adhesive strength (N/25mm)	
400P30	0.03	10	
400P50	0.05	15	
400P80	0.08	20	
400P100	0.10	20	
400P30BK	0.03	10	
400P50BK	0.05	15	
400P80BK	0.08	20	
400P100BK	0.1	21	

Method

#### **PSTC-101**

#### 1-1)CONDITIONING

Condition the sample rolls of tape in the standard conditions of 23  $\pm$  1  $^{\circ}$  C

#### 1-2)TEST SPECIMENS

The specimen shall be cut to 25mm width with a sharp razor blade.

A 2,040 g  $\pm$  45 g rubber-covered steel roller shall then be passed over the joint once in each direction at the rate of 10  $\pm$  0.5 mm/s.

#### 1-3) TEST METHOD

Clamp specimen tightly in jaws of tensile tester. Make certain that edges of the sample are parallel with the jaws of the tensile tester. Pull apart at a speed of 300 mm until the bond separates.

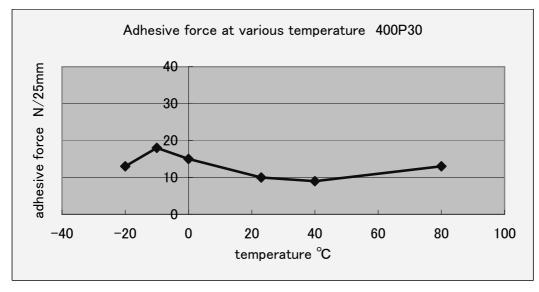
#### 2. Adhesive strength for various adherends

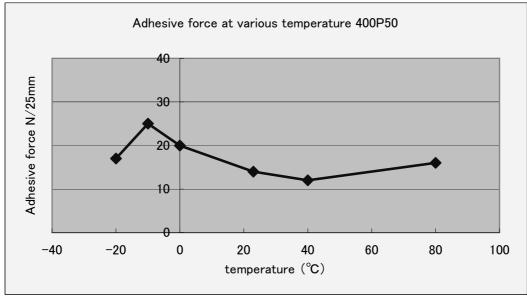
(: N/25mm)

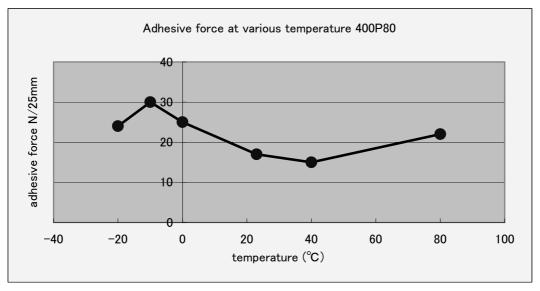
adherend	400P30	400P50	400P80	400P100
stainless steel	10	15	20	21
ABS plastics	11	16	21	22
Acrilic plate	9	17	20	21
Polycarbonate plate	8	15	17	18
Polypropylen plate	6	8	13	14

Backing sheet PET25µm
Tensile speed 300mm/min
Tensile angle 180°

#### 3. Adhesive force at various temperature







## 4. Stable weight peel test

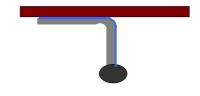
Test method

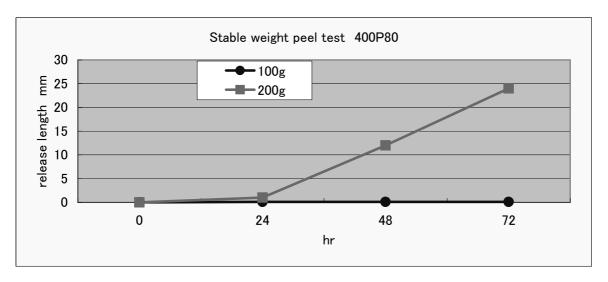
Backing PET film thickness 0.025mm
Substrate: Stainless steel plate (SUS304)

Tape width: 25mm

Bonding condition: One stroke with 2-kg roller

Peeling speed: 300mm/min

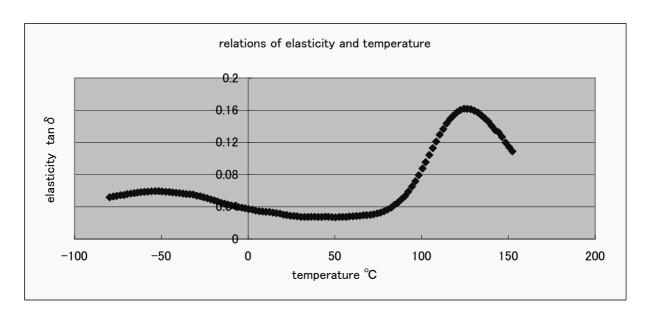




#### 5. Modulus

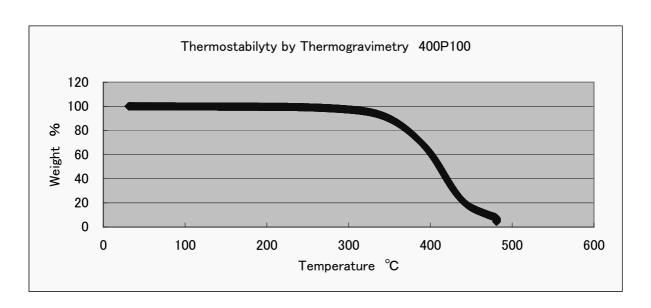
Test sample 400P50 Modulus 0.07 Mpa Method JIS K7161

#### 6. Properties about elasticity



The "tanδ" was calculated from E' elastic modulus and E" loss modulus.

## 7. Properties about heatstabilyty



#### **Notice**

- The above values are sample observed values, not the guaranteed performance.
- BK series are the tape used for a shading assistance use and not a thing guaranteeing light blocking effect.

User is responsible for determining whether the KGK product is fit for a particular purpose and suitable for user's method of application. Please remember that many factors can affect the use and performance of a KGK product in a particular application. The materials to be bonded with the product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a KGK product. Given the variety of factors that can affect the use and performance of a KGK product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the KGK product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

KGK make no warranties on above data.

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