



Very high adhesive force
Molecule Gradient Double Sided Tape

200A 300A series

Features

- ① Thin with high adhesive force.
- ② Excellent performance not only for metals but also for variety of resins
- ③ Excellent punching processability even for extremely small shapes and parts
- ④ Excellent surface followability /repulsion resistance
- ⑤ Excellent adhesive strength even in high temperature

Applications

Fixation of modules in smartphones, etc.

LCD-modules

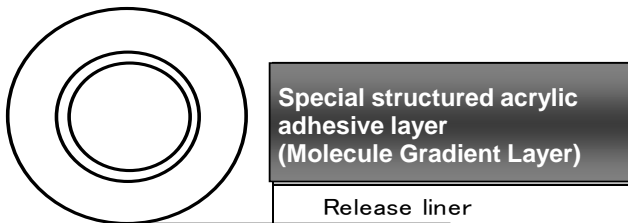
Touch panels

Rating plates

DSC parts

Sun shade parts in DSC (B series)

Structure



Properties

1) General Properties

1-1 Thickness and adhesive force

Grade	Thickness (mm)	Adhesive force (N/25mm)
200 A30	0.03	10
200 A50	0.05	18
300 A80	0.08	20
300 A100	0.10	22
200 A30 B	0.03	9
200 A50 B	0.05	15

Test conditions

Tensile speed: 300mm/min

(JIS Z0237)

180 degree peel

Measure value 24 hours after bonding

PET#25backing

1-2 Shear strength

Adherend A	Adherend B	200A30	200A50
SUS	SUS	45	55
SUS	SUS	65	75

Unit: N/10mmX10mm

1-2-1 Test Specimens

Sample shall be placed in a such a way that the conditioning atmosphere shall have free access to all normally exposed surfaces of the sample.

The specimen shall be cut to 10mm width and 10mm length with a sharp razor blade. A 2,040 g ± 45 g rubber-covered steel roller shall then be passed over the joint once in each direction at the rate of 10 ± 0.5 mm/s.

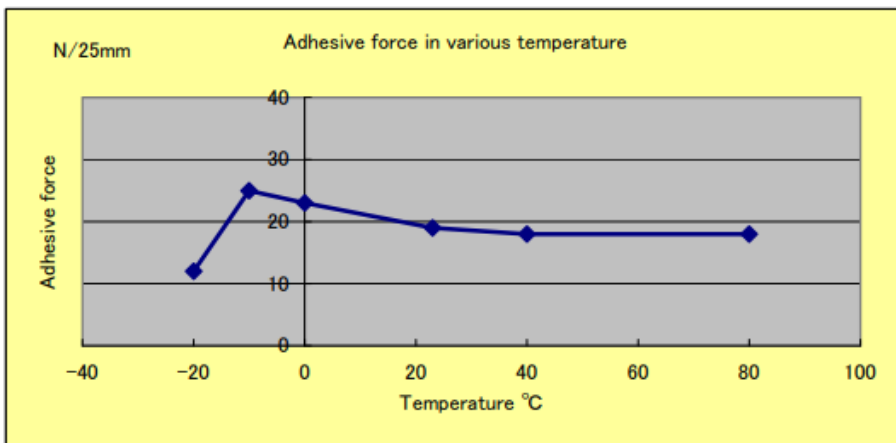
1-2-2 Test Method

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/s until the bonded portion separates.

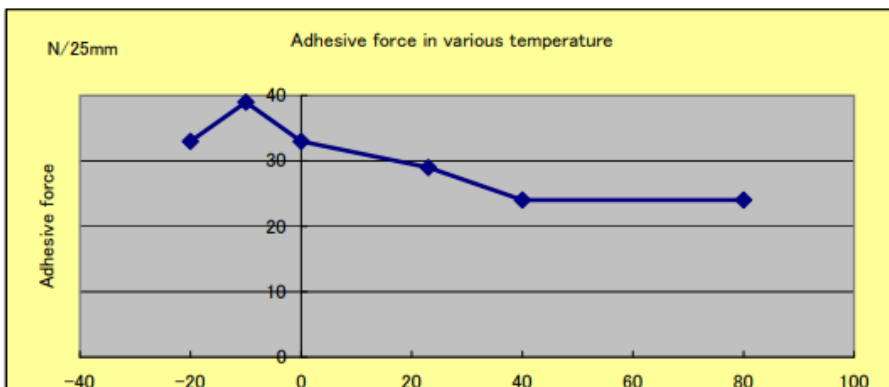


2.) Adhesive force in different temperature

200A50



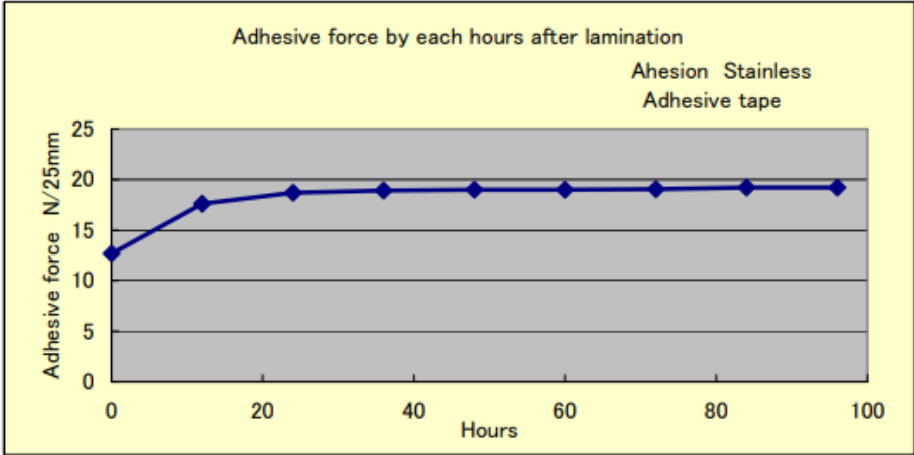
300A100



Temperature °C

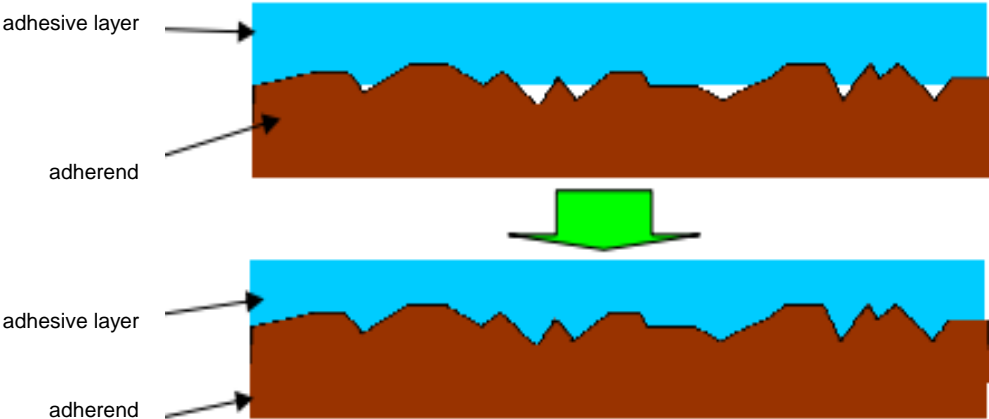
3) Adhesive force after lamination (each hours)

As time passes the adhesive force increases. After 24 hours the adhesive force reaches sufficient level.

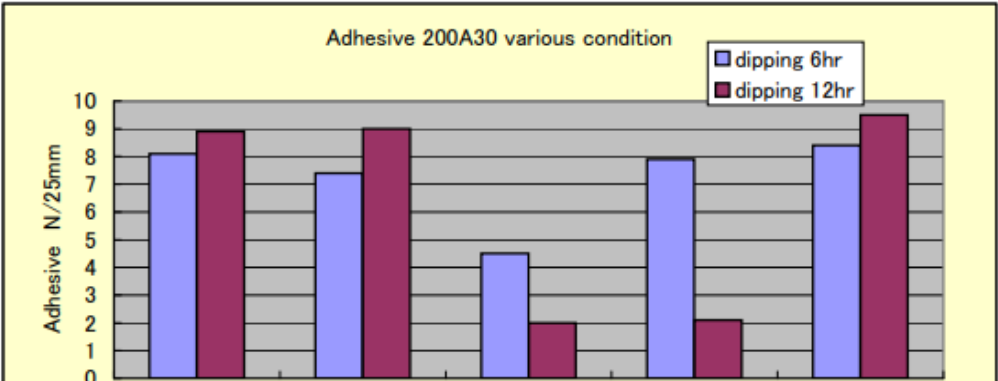


Reason

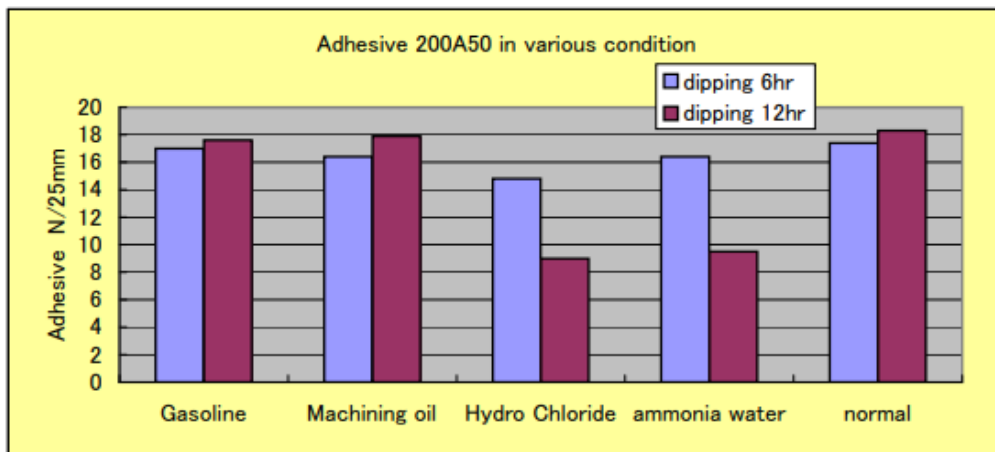
Reason Initially after bonding the adhesive agent has property to act like floating crowd and gradually fills the gap.



4) Stability of adhesive force with chemical substances



Gasoline Machining oil Hydro Chloride ammonia water normal

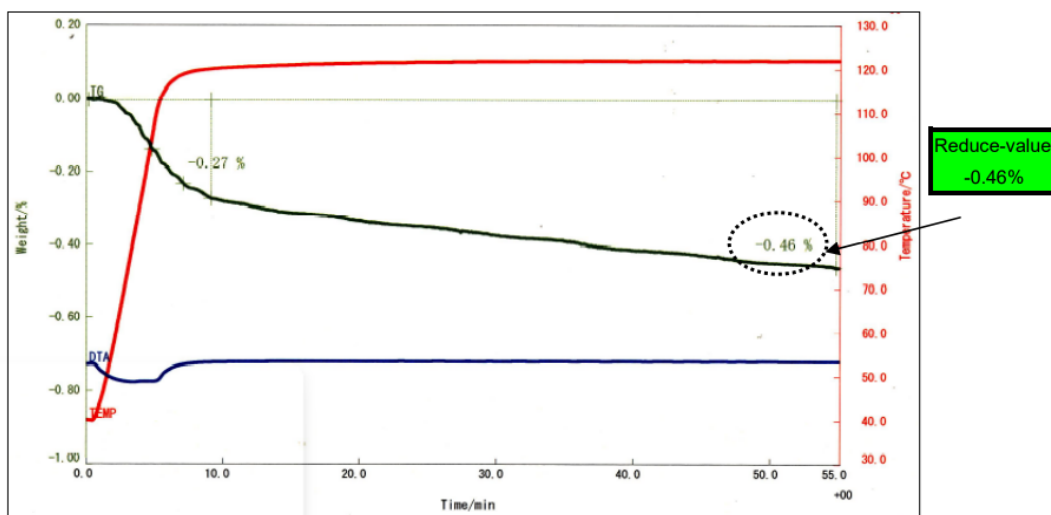


5) Outgas properties

Method Measure by thermal analysis equipment

Conditions Temperature: 150°C (=302°F)

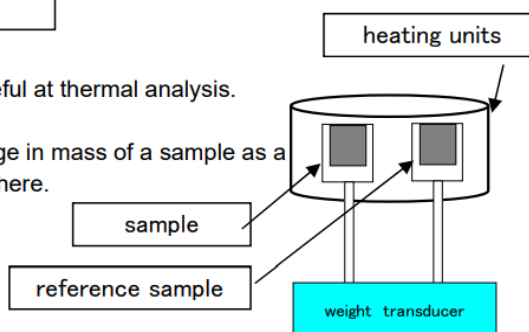
Amount of outgas = Amount weight reduction while the temperature increases from room temperature to 150°C



thermogravimetry

Thermo gravimetric analysis is very useful at thermal analysis.

Measures the amount and rate of change in mass of a sample as a function of T or t in a controlled atmosphere.

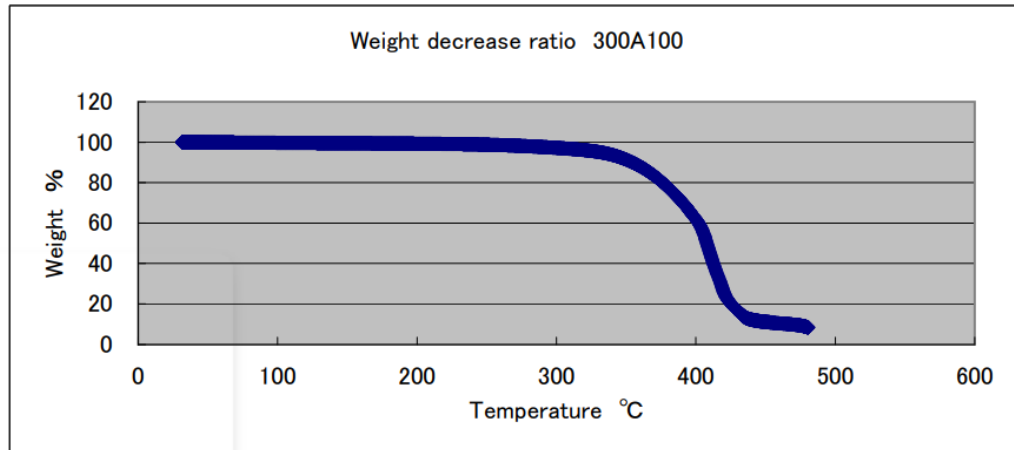


Thermo gravimetric analysis (TGA) is a thermal analysis technique which measures the amount

and rate of change in the weight of a material as a function of temperature or time in a controlled atmosphere.

6) Stability in heat

Data of thermo gravimetric analysis about 300A100 is as follows:



"200A300A" series material has heat-resistant properties.

The five percent decrease temperature is about 320 degree Celsius.

The data were taken using SEIKO TG/DTA6300

The temperature range is 40 to 500°C

Precautions on use

All technical data of KGK products are prepared based on the tests and measured values carried out in the laboratory of KGK Chemical Corp. as the standard.

However, KGK product characteristics may vary greatly depending on environment and adherend.

Therefore, these technical data herein are only for reference and not guaranteed.

Before using a KGK product please make sure that it is suitable for the intended use and environment.

Storage conditions

Please make sure to keep the bag unopened and place it in a box.

Please choose a cold and dark place for storage location to avoid exposure to direct sunlight.

In particular, please do not expose to high temperature and high humidity by following the figures below.

(Temperature: < 30 °C, Humidity: < 50%).

The warranty period: Six months from shipment from KGK for those kept unopened in the above mentioned storage conditions.

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