#### Japan Invention Awards

Molecular gradient double tape May clean gel Liquid crystal polymer film

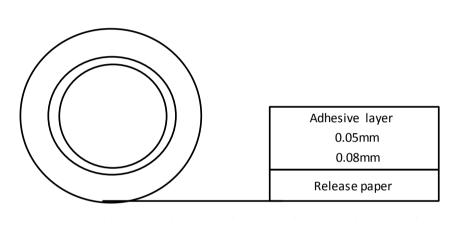
# Mechanical faiber tape 201MF



# What is Mechanical fiber?

KGK CONFIDENTIAL

Thin film tape with good cut performance, even without substrate



Structure having pseudo-crosslink in adhesive layer.

Succeeded to develop supple and strong adhesive force without using adhesive-inhibited nonwoven fabric.

Compared to nonwoven tape Thin film by non-substrate Improve Adhesive force Happen heat resistant performance

Fiber-containing adhesive

Outline of products

Application

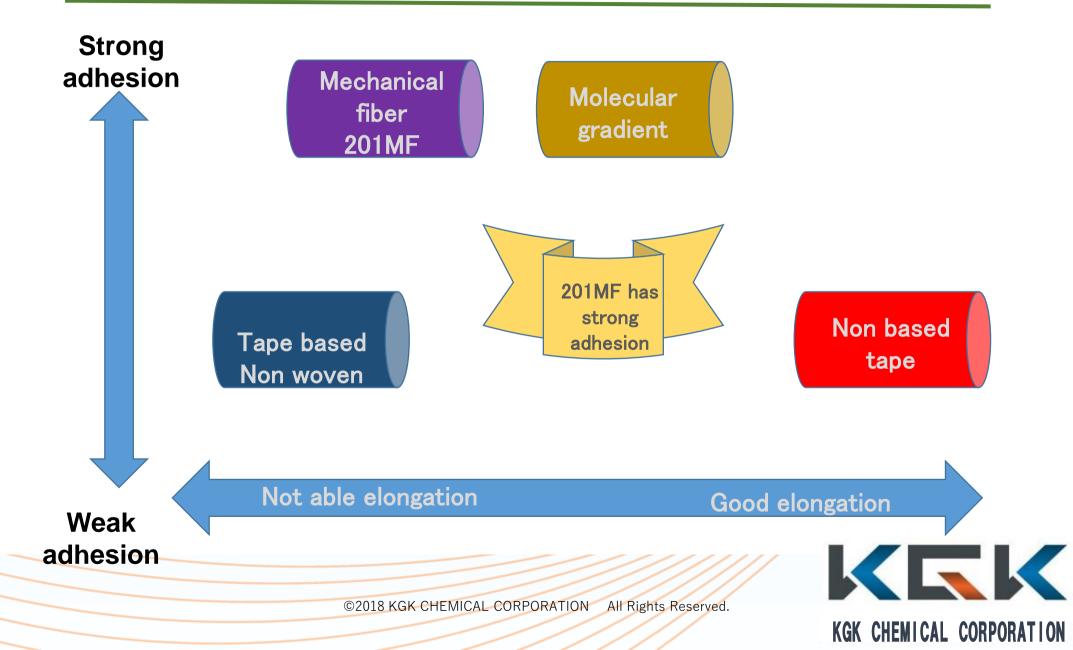
Every fixation



# What is Mechanical tape?

#### **KGK CONFIDENTIAL**

#### Product image



### **Basic properties**

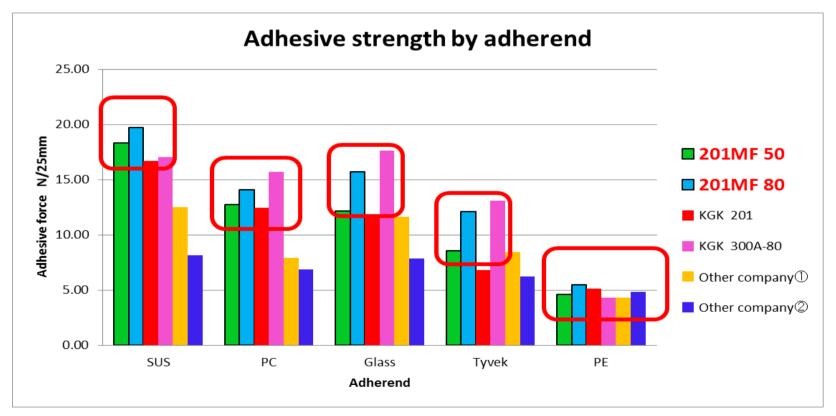
ltem	Thickness	Adhesive	tensil strength	product outline	
	mm	N/inch	N/10mm		
*201MF50	0.05	18	0.5	Acrylic adhesive	
*201MF80	0.08	20	0.7	Fiber polyester	
KGK 201	0.12	16	4	Acrylic adhesive	
				Base as non-woven	

Compared to our nonwoven fabric base tape, it is thinner and improves adhesion

It is possible to process with a light force



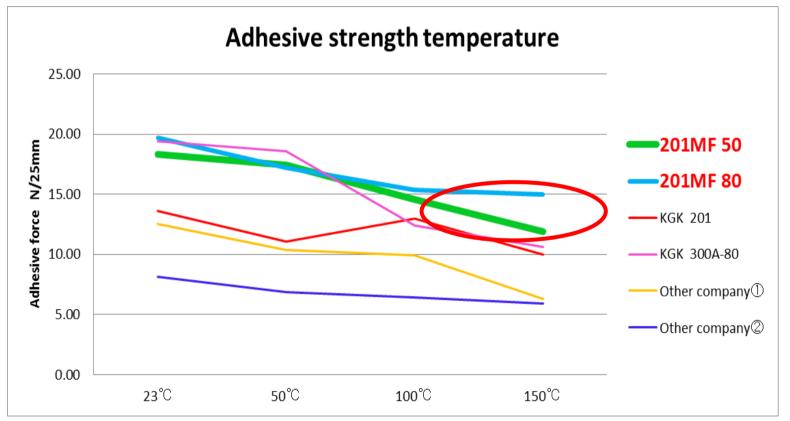
Adhesion to SUS, PC, glass, Tyvek, PE respectively



Higher adhesive strength than nonwoven fabric tape



●Comparison of adhesion at 23 ° C, 50 ° C, 100 ° C, 150 ° C ※ Measure after leaving 60 s at each temperature



201 MF maintains higher adhesion than other tapes even in high temperature environment

• Changes in holding force at 23  $^\circ$  C, 50  $^\circ$  C, 100  $^\circ$  C, 150  $^\circ$  C

#### Retention force by temperature (1kg, 6hr)

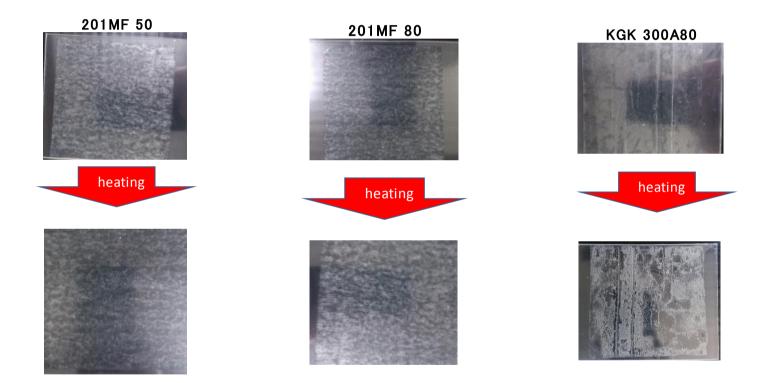
	(11.81 0111)					
Product						
Product	μm	23°C	50°C	100°C	150°C	
201MF 50	49.33	0.2	0.6	1.0	5h	Mechanical
201MF 80	80.00	0.0	0.4	1.0	5h	faiber
KGK 201	122.00	0.0	0.7	5h	5h	
KGK 300A-80	80.33	0.1	0.4	0.5	2.0	Molecular gradient
Other company(1)	139.33	0.0	0.1	5h	5h	
Other company②	125.33	0.0	0.1	4h	5h	

\* The colored part indicates the time when it fell.

Maintain retention force even at 100 ° C compared to nonwoven tape



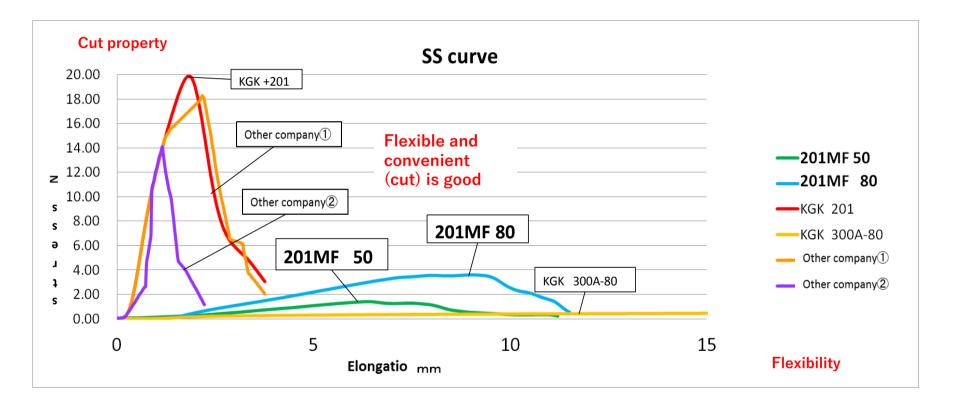
Heat resistance evaluation (leave for 100 h under 60 ° C environment)



•Make sure there is no foaming.  $\times$  201 MF white part is fiber



•SS curve



It is possible to cut with a lighter force than nonwoven fabric products.



# End of presentation

User is responsible for determining whether the KGK product is fit for a particular purposeand suitable for user's method of application. Please remember that many factors canaffect 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 use and suitable.

for the user's method of application.

KGK make no warranties on above data.

KGK CHEMICAL CORPORATION 〒359-0011 940 Minami-nagai Tokorozawa city Saitama pref. JAPAN phone +81-4-2944-5151



KGK CONFIDENTIAL