3M

Technical Data Sheet

テープ及び関連製品

Double Coated Tape
ST-416P

1.DESCRIPTION :

ST-416P is double coated tape used 2mil thick polyester film with firm acrylic adhesive. This product is designed for cleanly removable for temporary bonding with high adhesion.

2.CONSTRUCTION:

	Acrylic adhesive
	Polyester film
	Acrylic adhesive
	Double sided silicone release paper liner

3.FEATURE:

1. Easy positioning with transparent
2. Good mounting
3. Good heat resistance
4. Strong backing and good adhesive anchorage

4.APPLICATION:

1. Photo-Polymer plate mounting
2. Polishing and mounting
3. Joining electric parts
4. Nameplate

5.PHYSICAL PROPERTY:

	UNIT	ST-416P
Tape Thickness	mm	0.125
Liner thickness	mm	0.110
180deg peel	N/cm	5.5

180deg. Peel test method－JIS Z 0237－
adherent：Stainless Steel
2kg roller press,20～40min. dwell
Peel Rate：300mm/min

6.ADHESION:

1.90deg. peel to various surface

		ST-416P
90deg. peel N/cm	Stainless Steel	4.3
	Aluminum	3.0
	ABS	6.1
	PMMA	6.1
	PP	3.0

Test Method：
2kg Roller press
20～40min. dwell
Peel Rate：300mm/min

2.Dybamic Shear to various surface

		ST-416P
Dynamic Shear N/cm²	Stainless Steel	113
	Aluminum	98
	ABS	122
	PMMA	125
	PP	61

Test Method：
2kg Roller press
24hr. dwell
Peel Rate：300mm/min

3. Dynamic shear at high temperature

		ST-416P
Dynamic Shear N/cm²	5℃	270
	25℃	180
	50℃	86
	75℃	39
	100℃	24

Test Method:
Adherent: Stainless Steel
2kg Roller press,
24hr. dwell
Peel Rate: 300mm/min

4. Static Shear(mm, ( )in min till fall)

	Stainles	Aluminu	ABS	PMMA	PP
5℃	0	0	0	0	0
25℃	0	0	0	0	0
50℃	0	0	0	0	2.4
75℃	0	0	0	(46)	(24)

Test Method
Sample dimension 25×25 mm
2kg Roller press
24hr. dwell, 1kg weight

5. Reliability test under Humidity

		ST-416P
Dynamic shear (%)	initial	100
	3days	140
	7days	170
	14days	190
	21days	200
	28days	200

Test Method
Adherent: Stainless Steel
2kg Roller press,
24hr. dwell
Condition 50℃×95%RH
Peel Rate: 300mm/min

6. Water resistant

		ST-416P
Dynamic Shear (%)	Initial	100
	1days	86
	3days	84
	7days	85

Test Method
Adherent: Stainless Steel
2kg Roller press,
24hr. dwell
Condition 40℃ water
Peel Rate: 300mm/min

7. Solvent resistant

		ST-416P
Dynamic Shear (%)	Initial	100
	Kerosene	90
	Ethanol	90

Test Method
Adherent: Stainless Steel
2kg Roller press,
24hr. dwell
2hr.dip in solvent→30min.at room temp.
Peel Rate: 300mm/min

Note: All statements, technical information and recommendations herein are based on tests we believe to be reliable, but the accuracy of completeness thereof is not guaranteed.