

INOPLAST PL

Self Adhesive Butyl Membrane Waterproofing

Description

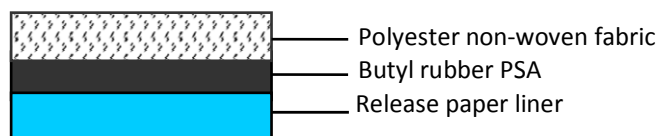
Inoplast PL is a single-faced adhesive tape of polyester(PET) non-woven fabric backing which is coated by excellent waterproof butyl rubber pressure-sensitive adhesive (PSA).

Usable for various applications which require damp proof and durability since it shows well-balanced and high adhesion in a wide range of temperature and the PSA is superior in air-tightness.

1. Structure



Application of Inoplast PL



Thickness: 0.75mm

2. Application

- Temporary fixing of exterior wall material, and waterproof packing of joints
- Waterproof sealing around interior plumbing
- Waterproof sealing of waterproofing sheet joint, skirt, or drain at rooftop
- Joint sealing of roofing membrane
- Waterproofing around window frame for residential house

3. Features

- Great weatherability
- Stable performance under variety of climate due to using special butyl rubber adhesive
- Superior water resistance
- Suitable for outdoor use and places where get contact with water. Since PET fabric backing can be coated with paint or mortar, the tape is good for use for outdoor waterproofing construction.
- Superior adhesive property
- Thick adhesive layer conforms well to rough surfaces, and helps obtaining long term waterproofing property when used for jointing of construction materials.
- Good adhesion to hard-to-adhere materials such as rubbers, foams, or polyethylene
- Excel in safety
- Can be used at places with limited ventilation due to containing no solvents. No worry for toxicity or fire disaster.

4. Adhesive properties

Test item		Unit	Value
Adhesion	BA SUS	N/10mm	7.84
	Polished SUS		(7.84)
Ball tack		Ball No.	34
Tensile strength		N/10mm	51.0
Elongation		%	35

【Test method】

Adhesion: In accordance with JIS Z 0237(2009)

Ball tack: In accordance with manufacturer

Tensile and elongation: In accordance with JIS Z 0238(2009)

Test item		Unit	Value
Adhesion	Concrete	N/10mm	10.92
	Stainless		11.76
	Aluminum		13.18
	Steel		13.92
	Glass		15.65
	Slate (Top)		17.06
	Slate (Bottom)		17.34
	Bakelite		14.75
	PVC		14.91
	Polyethylene		15.30
	EPDM butyl		17.77
	rubber sheet		10.28
	Veneer		
Tensile strength		N/10mm	51.0
Elongation		%	35

Measuring conditions : Temp.23°C Humidity 65%RH Test

methods :

Tensile strength : In accordance with JIS Z 1524 Article 7・9 (Interval:125mm Peeling speed 300 mm /min)

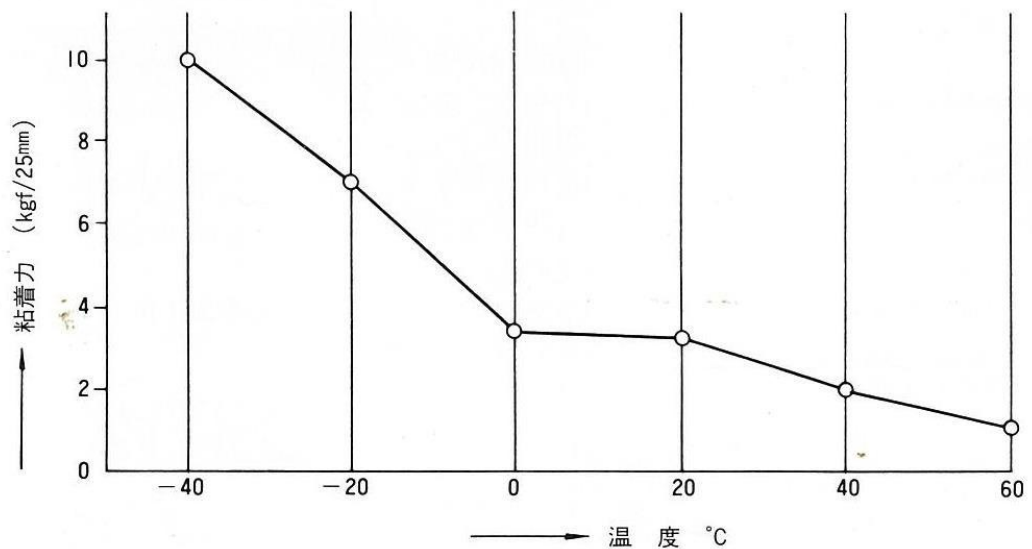
Elongation : % of elongation at break

Adhesion : JIS Z 1528 Article 6・7 (180°peeling)

Applying conditions : Onereciprocaction by metallic roller (2kg load, diameter 83mm, width 45mm), which is covered by rubber (hardness 80Hs, 6mm thick) at the speed of 300mm/min.

Peeling conditions: Peeling by 180° peel at the speed of 300mm/min after 20mins or more from application. Peeling resistance force to be adhesion.

5. Temperature dependency of adhesion



図－1 粘着力の温度依存性

Test plate : Stainless plate

Test method : Application of specimen at conditions of 23°C and %RH. Keep the specimen at each temperature for 20mins. Specimen to be peeled off at each temperature by 180°peeling.

6. Variation per time (Cycle test)

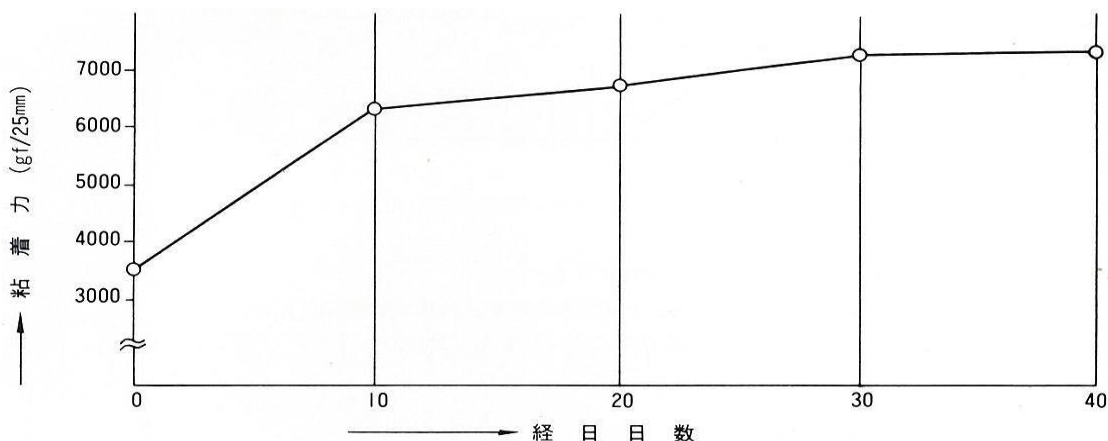


図-2 サイクル試験結果

Test plate : Stainless plate

Test method : Tape to be applied at 23°C, %RH. Condition 1 :

Thermostatic chamber at 80°C Condition 2 :

Water tank at 20°C

Specimen to be placed in condition 1 and 2 everyday (Cycle). After certain elapsed days, specimen to be kept under the circumstance of 23°C, %RH for 2hrs. Then adhesion to be measured by 180°peeling.

Remarks: No change in appearance (such as cracking, etc.) in this test

Adhesion of Inoplast PL increases as times elapse. Furthermore, no decline of adhesion even under water or rapid change of temperature.

7. Heat resistance property

表-3 耐熱性試験結果

項目	経日数 温度 °C		1	5	10	15
外観変化	50		亀裂 熱フロー (ダレ) } なし			
	75					
	100					
	120					

Test method : Specimen to be applied to glass plate vertically. Visual observation of appearance of specimen, which is placed in each temperature condition inside thermostatic chamber (50, 75, 100°C and 120°C) after certain days.

Inspection items: Adhesive flow, generation of crack, and shrinkage of tape

8. Cold resistance property

表-4 耐寒性試験結果

被着体	測定温度	-30°C	-40°C	-54°C	-60°C	-70°C
100μmポリエチレンフィルム		A	B	C	D	D
ケント紙		A	B	C	C	C

Judgment criterion

A : Nothing peculiar

B : Slight declination of flexibility, but no peel off

C : No flexibility and break off of tape, but no peel off
D : No flexibility and break off of tape, and tape peel off

Test method : In accordance with Fed. Method Std. №101B Method 2051

Specimen to be applied to polyethylene film or Kent paper at normal temperature. Keep it under 65°C for 24hrs. Then keep it under each low temperature for 2hrs or more. Then roll it on iron bar which was also chilled under the same condition as specimen. Observe specimen's appearance. (Operation was also done in the same cooling conditions)

Inoplast PL performs its adhesion good enough under low temperatures.

9. Weather resistance

表-5 耐候性試験結果

項目	単位	照射時間				
		0 (常態)	100	300	500	1000
外観	—	—	変化なし	変化なし	変化なし	変化なし
引張強さ	kgf/25mm	7	7	7	7	7
伸び	%	20	20	22	21	22
粘着力(ステンレス板)	gf/25mm	3,400	6,200	6,800	7,900	6,900

Test method : Weather-O-Meter conditions: 18mins of rain in 120mins cycle

25mm width specimen to be applied to stainless plate at room temperature. Appearance, tensile strength, and elongation of specimen were measured after exposed to sunshine carbon weather-o-meter (WE・SUN-HC) .

No declination of adhesion of Inoplast PL even after long term outside use. Furthermore, its adhesion even tends to increase in such condition. Moreover, no cracking, nor shrinking were found.

10. Standard dimensions and packing unit

Dimensions		
Width		Length
5 cm	×	20 m
10 cm	×	20 m
1 m	×	20 m

11. Precautions for use

- (1) Please apply tape after removing dirt, dust, moisture and oil from the surface since enough adhesion is not obtainable if the surface is stained.
- (2) Please press firmly after applying the tape to obtain enough adhesion.
- (3) For the keeping of tape, please avoid direct sun-ray and the heat sources as heating equipment and store it at cool place.
- (4) Please do not use for electrical insulation purpose other than electrical insulation tape.
- (5) Please do not apply directly to the car body, furniture, walls, glass and PVC products since causing of discolor, adhesive residue, and paint peel-off.
- (6) Since adhesive residue and rash may be caused by using of other tapes than adhesive tape for skin, please do not apply the tape to the skin directly.
- (7) Please test well before actual use as tape may contaminate or leave adhesive depending on type of adherend.
- (8) Please consult us for special application. (Toll free: 0 1 2 0 - 1 4 7 - 2 2 4)
- (9) Described values are examples of measured values, and not guaranteed

values.

- (1 0) The lead-time varies by conditions. Please inquire us for obtaining updated information.
- (1 1) Specification may be subject to change without prior notice.
- (1 2) Please verify whether the tape is suitable for your application before use.
- (1 3) We cannot be held responsible for any damage incurred as a results of using. Please use after enough confirmation.



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