

# *Geoloy 328* *Geoloy 530*

*Geotechnical engineering fabrics*



*Land Fill*  
*Pond Liner*  
*Storm water runoff*  
*Municipal wastewater ponds*  
*Containment*  
*Floor coverings*  
*Oil storage*

**WONPONG**



## Geology?

*Through the years of constant study and research of membrane, Geoloy series was finally established with higher physical strength and strong chemical resistance to solve the containment issues in water retention, lake lining, garden ponds and various chemical substance protection situations*

### **The feature of Geoloy Series**

- Superior physical strength
- High durability
- Excellent chemical resistance
- Excellent weather proof
- High welding property
- Exceptional water repellency
- Superior puncture resistance
- Superior dimensional stability



### **Weather Resistance**

*The Xenon-Arc accelerated weathering tester reproduces  
The damage caused by sunlight, rain and dew.  
In a few days or weeks, The Xenon-Arc tester can reproduce  
The damage that occurs over months or years outdoors.*



## **Chemical Resistance**

Wonpoong observe a 28 days immersion test as per ASTM D543-87 modified. The ratings were the result of our laboratory tests by meeting the ability for the chemical resistance. As the result, the resistance will be best on the ability of material that is a wide range of fuels and chemical that can be used in diverse application.



## **Welding Compatibility**

Geoloy Series can be compatible well with all of weldable equipment by using high heat such as the high frequency and hot air welding easily and simply through higher welding adhesion. It can be handle and fabricated in virtually the same manner as flexible PVC materials.

## **Durability**

- Assure the excellent durability by producing with the uniform thickness.
- Treat the water repellency to prevent the water penetration
- Use the most appropriate polyester fabric that is having excellent tensile and tear strength as warp knit X scrim
- Create the superior durability through our technical know-how that has been constructed over 40 past years
- Gain the optimum performance and recipe through our laboratory

## Geomembrane Chemical Resistance

No	Chemical	Geoloy 328	Geoloy 530
1	Acetic acid (5%)	A	A
2	Acetic acid (50%)	C	C
3	Acetone (99.5%)	C	C
4	ASTM #1 oil	A	A
5	ASTM #2 oil	A	A
6	ASTM #3 oil	A	A
7	Ammonium Phosphate	T	T
8	Ammonium Sulfate	T	T
9	Aqua Regia	T	T
10	ASTM Fuel A (=Isooctane)	A	A
11	ASTM Fuel B	B	B
12	ASTM Fuel C	B	B
13	ASTM Fuel F (=Diesel)	A	A
14	Benzene (99.5%)	C	C
15	Calcium Chloride (30%)	A	A
16	Calcium Chloride Solutions	T	T
17	Calcium Hydroxide	T	T
18	Chlorine solution (0.3%)	C	C
19	Corn oil	A	A
20	Cyclohexane	B	B
21	Ethanol (=Ethyl Alcohol)	A	A
22	Ethyl acetate	C	C
23	Ethylene Glycol	A	A
24	Furfural	T	T
25	Gasoline	B	B
26	Glycerins	A	A
27	Hydrochloric acid (10%)	A	A
28	Hydrochloric acid (36%)	C	C
29	Isopropyl alcohol	A	A
30	Ivory Soap	A	A
31	Kerosene	A	A

No	Chemical	Geoloy 328	Geoloy 530
32	Lactic acid	A	A
33	Linseed oil	A	A
34	Magnesium Chloride	T	T
35	Magnesium Hydroxide	T	T
36	Methanol	A	A
37	Methyl elhyl ketone	C	C
38	Methylene chloride	C	C
39	Mineral spirits	A	A
40	Naptha	A	A
41	Nitric acid (5%)	A	A
42	Nitric acid (50%)	C	C
43	Perchlorethylene	B	B
44	Phenol	C	C
45	Phosphoric acid (50%)	A	A
46	Phosphoric acid (85%)	C	C
47	Phthalate plasticiser	C	C
48	Salt water (25%)	A	A
49	Sea water	A	A
50	Sodium Acetate Solutions	T	T
51	Sodium Bisulfite Soutions	T	T
52	Sodium hydroxide (40%)	C	C
53	Sodium phosphate	A	A
54	Sulphuric acid (50%)	A	A
55	Sulphuric acid (97%)	B	B
56	Tannic acid (10%)	C	C
57	Tannic acid (40%)	C	C
58	Tetrahydrofuran	C	C
59	Toluene	C	C
60	Turpentine	A	A
61	Vegetable oil	A	A
62	Xylene	C	C

- A** Little or no effect
- B** Somewhat effect
- C** Severe effect
- T** Likely to be severe effect

The chemical data shown are the result of laboratory test for the chemical resistance as a guide only. The rating were on the basis of a 28 days immersion test (as per ASTM D543-87 modified) at the chemical test equipment.

The result show the ability of the material to meet its performance by simulating the actual performance test.

Wonpoong offers a wide array of materials to ensure that the perfect product is chosen for each customer's unique needs based on the beside information that is the best available on this material when the product meets its final destination.

All purchase order for Wonpoong products will be presented with the standard Term and sale condition prior to any recommendation.

## Physical Specification

Property	Method	Geoloy 328	Geoloy 530
Base Fabric Type		Polyester	Polyester
Base Fabric Weight	ASTM D751	3.4 oz/yd <sup>2</sup> (115 gsm)	5.4 oz/yd <sup>2</sup> (183 gsm)
Finished Coated Weight	ASTM D751	28 oz/yd <sup>2</sup> (950 gsm)	30 oz/yd <sup>2</sup> (1017 gsm)
Thickness	ASTM D751	0.78 mm	0.94 mm
Cut Strip Tensile	ASTM D751	260 / 215 lbf/in min.	360 / 350 lbf/in min.
Grab Tensile	ASTM D751	760 / 650 lbf min.	1135 / 1265 lbf min.
Tongue Tear	ASTM D751	42 / 33 lbf	47 / 41 lbf
Trapezoid tear	ASTM D2263	95 / 60 lbf min.	96 / 90 lbf/in min.
Low Temperature Bend TEST (-35°C, 4hrs)	ASTM D 2136	No Crack	No Crack
Dimensional Stability	ASTM D 1204	0.5 / 0.2 %	0.5 / 0.2 %
Hydrostatic Resistance	ASTM D 751	above 2 450 kPa	above 2 450 kPa
Adhesion	ASTM D 751	30 lbf/2" min.	30 lbf/2" min.
Adhesion-Heat Welded Seam	ASTM D 751	34 lbf/2" min.	45 lbf/2" min.
Abrasion Resistance	ASTM D 3389	25.6mg / 100cycle	20.4mg / 100cycle
Weathering Resistance	ASTM D 6878	-	-
Wicking	ASTM D 751	1/8 in	1/8 in
Bursting Strength	ASTM D 751	435 lbf (1934.2 N)	696 lbf (3096.4 N)
Puncture Resistance	ASTM D 4833	156 lbf (695.1 N)	248 lbf (1103.1 N)
Environmental/ Chemical Resistance Properties	ASTM D 741	See Chemical Resistance Table	





*Since our establishment in 1973,*

**WONPOONG**

*have been supplying various products which are applicable to industrial, building, and real-life fields to over 70 countries. Geoloy Series provides wide array of materials to meet each customer's unique needs by offering excellent weather resistance and chemical resistance as well as superior welding compatibility. Through our technical know-how that has been built over the past 40 years, we will create more stable membrane solutions and establish customized service and exceptional quality control system that can be used in recreational sites, waste pits, canals, water storage, floor coverings, plating, fuel, oil storage and containment, landfills and many other applications.*



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