

Polyurethane

Our company’ s uniquely blended polyurethane has many unique characteristics. Compared to commonly used rubber and vinyl it is roughly half the weight, has a strong physicality, and a much weaker scent. For our polyurethane products, we offer two types of gloves; a type for use with solvents as well as a thermal type for protection against cold.

Safety Data

Combustion Gas Test (JIS K 2541)

In this test the combustion temperature is 800±50C. The “Lower Limit of Detection” is the lowest quantity of a substance that can be detected.

Sample Type Test Item	550	5000	102	104	H40	Lower Limit of Detection
	Product for Resistance to Solvents					Product for Resistance to Static Electricity
HF	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.1
HCl	4.1	Not Detected	1.6	1.8	Not Detected	0.1
HBr	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.1
HCN	0.22	0.25	0.12	0.059	0.16	0.005
SOx	Not Detected	Not Detected	0.3	0.4	1.3	0.1
NOx	1.7	1.4	2.2	1.7	1.2	0.5

Testing carried out by: Chemicals Evaluation and Research Institute, Japan

Dissolution Test

In this test the combustion temperature is 800±50C. The "Lower Limit of Detection" is the lowest quantity of a substance that can be detected.

Test Item	H3	20	440	550	5000	102	103	104	H4	H40	300	3000	Lower Limit of Detection
	Product for Resistance to Solvents												Product for Resistance to Static Electricity
Br ⁻	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.1
Ca	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.3	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.2
Cl ⁻	Not Detected	Not Detected	0.4	3.2	Not Detected	1.7	3.1	1.1	Not Detected	Not Detected	1.5	Not Detected	0.1
F ⁻	Not Detected	Not Detected	Not Detected	2.4	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.1
Na	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.05	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.05
NO ₃ ⁻	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.1
PO ₄ ³⁻	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.1
K	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.05
Cu	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.1

Testing carried out by: Chemicals Evaluation and Research Institute, Japan

Analysis Test

This test assesses whether or not various substances can be detected in an environment of over 100C. After analysis there were no problems detected in the quality of material or eluted substances, which indicates that the products are suitable for use in the food industry. However, use in the food industry is not the original intended use for these products.

Test Item		Sample Type												Product for Protection Against Cold		
		Products for Oil Resistance:		220	20	H3	223	Resistance to Solvents			550	5500				
Dissolution Test	Material Test															
	Cadmium/Lead	Below Limit	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
	Phenol	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
	Formaldehyde	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
	Zinc	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
	Heavy Metals	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
Evaporation Residue (Water)		Acceptable (10ppm)	Acceptable (36ppm)	Acceptable (31ppm)	Acceptable (11ppm)	Acceptable (19ppm)	Acceptable (13ppm)	Acceptable (19ppm)	Acceptable (34ppm)	Acceptable (18ppm)	Acceptable (less than 5ppm)					

Testing was carried out in accordance with "Article 3, section D3: Rubber equipment, containers and packaging" of the Food Items and Additives Standards (Ministry of Welfare Public Notice #370, Showa 34 '1959)

Abrasion Resistance

The results of the Abrasion Resistance Test (JIS K7204) indicate that the polyurethane used by Dailove has 5 times the abrasion resistance of vinyl and 7.5 times that of natural rubber.

Chemical Resistance Data Sheet

The following data is meant as a reference showing our product’ s reaction to various chemicals. The data is not meant as proof of the product’ s performance ability. In addition, this data does not indicate the product impermeability.

Performance Grade

Excellent	Good	Bad	Dissolved
⊙	○	△	×

CAS No.	Solvent Name	Solvent Resistance						Anti-Static Solvent Resistance					
		Lined			Un-lined			Lined			Un-lined		
		223	440 series	550	5500 series	H3	20	320	300 series	3000 series	H4/H40		
8006-64-2	Turpentine Oil	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
8032-32-4	Petroleum Benzine	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
8006-61-9	gasoline	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
110-54-3	n-Hexane	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
108-88-3	Toluene	⊙	⊙	⊙	⊙	○	⊙	⊙	⊙	⊙	○		
108-38-3	Xylene	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
71-43-2	Benzene	○	○	⊙	⊙	○	○	⊙	⊙	⊙	○		
56-23-5	Carbon Tetrachloride	⊙	⊙	⊙	⊙	⊙	⊙	○	⊙	⊙	⊙		
71-55-6	1,1,1-Trichloroethane	⊙	○	⊙	⊙	○	○	○	⊙	⊙	○		
540-59-0	1,2-Dichloroethylene	○	○	○	⊙	○	○	⊙	○	⊙	○		
79-01-6	Trichloroethylene	○	○	○	⊙	○	○	○	○	⊙	○		
127-18-4	Tetrachloroethylene	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
75-09-2	Dichloromethane	○	○	○	○	△	△	○	○	○	△		
67-86-3	Chloroform	○	△	△	○	△	△	△	△	○	△		
67-56-1	Methanol	⊙	⊙	⊙	⊙	○	⊙	⊙	⊙	⊙	⊙		
67-63-0	Isopropyl Alcohol (IPA)	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
60-29-7	Ethylether	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
67-84-1	Acetone	⊙	⊙	⊙	⊙	○	○	⊙	⊙	⊙	○		
78-93-3	Methyl ethyl ketone (MEK)	⊙	⊙	⊙	⊙	○	○	⊙	⊙	⊙	○		
108-10-1	Methyl isobuthyl ketone (MIBK)	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	○		
108-94-1	Cyclohexanone	○	○	○	○	△	△	○	○	○	△		
79-20-9	Methyl Acetate	⊙	⊙	⊙	⊙	○	○	⊙	⊙	⊙	○		
141-78-6	Ethyl Acetate	⊙	⊙	⊙	⊙	○	○	⊙	⊙	⊙	○		
123-86-4	n-Butyl Acetate	⊙	⊙	⊙	⊙	⊙	○	⊙	⊙	⊙	○		
109-86-4	Ethylene Glycol Monomethyl Ether	⊙	⊙	⊙	⊙	○	○	⊙	⊙	⊙	○		
110-80-5	Ethylene Glycol Monoethyl Ether	⊙	⊙	⊙	⊙	○	○	⊙	⊙	⊙	○		
75-15-0	Carbon Disulfide	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
75-05-8	Acetonitrile	⊙	⊙	⊙	⊙	○	○	⊙	⊙	⊙	○		
109-89-7	Diethylamine	⊙	⊙	⊙	⊙	○	○	⊙	⊙	⊙	○		
98-95-3	Nitrobenzene	⊙	⊙	⊙	⊙	○	○	⊙	⊙	⊙	○		
109-99-9	Tetrahydrofuran (THF)	△	△	△	×	×	×	△	△	×	×		
68-12-2	N,N-Dimethylformamide (DMF)	×	×	×	×	×	×	×	×	×	×		
872-50-4	N-Methyl-2-pyrrolidone (NMP)	×	×	×	×	×	×	×	×	×	×		

CAS No: The unique identification number given to chemical substances for use in the CAS Registry, a registry of chemical substances managed by CAS (Chemical Abstracts Service), a division of the American Chemical Society.
Permeability: Dailove’s solvent resistance use gloves are not certified as impermeable. For products with provisions for impermeability please see the T series.

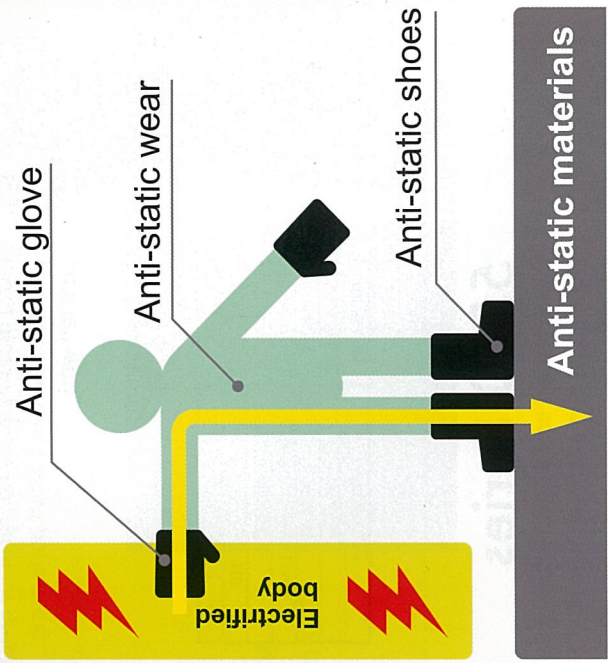
Anti-static Solvent Resistance Glove

These gloves ground static electricity and prevent the breakout of fire from solvents used in overdry facilities. For use in facilities using solvents and desiring a static electricity solution -- including oil refining, painting, solvent production, dust cleanup, commercial printing, gasoline handling, and gunpowder handling.



This product lineup is designed to conduct electricity from the gloves and through the body onto the ground, grounding static electricity.

Warning: As shown in the diagram, other parts of the body and the floor surface must be covered in anti-static material for the product to work properly.



Un-lined Types

Electrical Resistance $10^3\sim10^6\Omega$

These models are based on the Dailove 20 and H3 models, retaining their solvent-resistant capabilities and refining them for use in static electric environments. Suitable for use in facilities using solvents that involve small, detailed work requiring anti-static solutions.



H4

Ultra-thin 0.1mm type.

Powder Free					
Size	LL	L	M	S	
Length(mm)	300				
Liner	Un-lined				
Thickness(mm)	0.1				
Color	Black				
Carton Volume	100 pairs				
Retail Price	680 JPY/pair				



H40

Ultra-thin 0.2mm type.

Powder Free					
Size	LL	L	M	S	
Length(mm)	300				
Liner	Un-lined				
Thickness(mm)	0.2				
Color	Black				
Carton Volume	100 pairs				
Retail Price	1,400 JPY/pair				

Lined Types

Electrical Resistance $10^3\sim10^7\Omega$

These models are based on the Dailove 223 and 5500 models' solvent-resistance, with the added benefit of static electricity protection. These models are particularly tough and designed for facilities where a lot of wear and tear is exerted on the gloves.

300 Series



300

Granulated Type				
Size	LL	Lw	L	
Length(mm)	260			
Liner	Cotton100%+Conductive fiber			
Thickness(mm)	1.05(Polymer and Liner)			
Color	Black			
Surface	Granulated			
Carton Volume	50 pairs			
Retail Price	2,100 JPY/pair			



3000

Non-Bleed Type				
Size	Lw	L		
Length(mm)	260			
Liner	Cotton100%+Conductive fiber			
Thickness(mm)	1.0(Polymer and Liner)			
Color	Black			
Carton Volume	50 pairs			
Retail Price	2,600 JPY/pair			



330

Granulated Type				
Size	LL	Lw	L	
Length(mm)	330			
Liner	Cotton100%+Conductive fiber			
Thickness(mm)	1.05(Polymer and Liner)			
Color	Black			
Surface	Granulated			
Carton Volume	50 pairs			
Retail Price	2,800JPY/pair			



3300

Non-Bleed Type				
Size	Lw	L		
Length(mm)	330			
Liner	Cotton100%+Conductive fiber			
Thickness(mm)	1.0(Polymer and Liner)			
Color	Black			
Carton Volume	50 pairs			
Retail Price	3,300 JPY/pair			

Full-length type.

300WN

Granulated Type



Size	LL	Lw
Length(mm)	260	
Liner	wooly nylon+Conductive fiber	
Thickness(mm)	1.75(Polymer and Liner)	
Color	Black	
Surface	Granulated	
Carton Volume	50 pairs	
Retail Price	2,100 JPY/pair	

This model features an inner lining of wooly nylon, strengthening the overall structure and increasing resilience against heavy use.

301H

Granulated Type



Size	Lw
Length(mm)	260
Liner	Nap raising
Thickness(mm)	2.05(Polymer and Liner)
Color	Black
Surface	Granulated
Carton Volume	50 pairs
Retail Price	2,300 JPY/pair

This model features enhanced cold resistance for use in cold settings.

320

This model features the most flexibility of all the lined types, making it suitable for long periods of continuous work.



Corrugated Type

Size	LL	Lw	L	M	S
Length(mm)	260				
Liner	Cotton100%+Conductive fiber				
Thickness(mm)	0.95(Polymer and Liner)				
Color	Black				
Surface	Corrugated				
Carton Volume	100 pairs				
Retail Price	1,900 JPY/pair				