

The Chemical Permeation Guide

# Gloves Vs Chemicals

As we proceed with our daily lives we may encounter hazards at the workplace. This guide will aid you in preparing for one such hazard, chemical hazards. DPL has a range of gloves that have been specially developed to protect users from many of the dangerous and complex chemicals, these can be in a pure or diluted form but most often as mixtures.

By understanding when and where each glove should be worn, you can greatly help to mitigate the incidence of localized injuries such as irritations or burns. Furthermore, we can prevent more severe and chronic impairments which could lead to detrimental consequences. Remember, there is no such thing as a 'broad spectrum' or 'universal' chemical protective glove. So please take the time to read through this Chemical Permeation Guide and understand the different chemical applications that our gloves may be used for.

## **CHEMICAL RESISTANCE TESTS**

Before looking at the charts here are some key words that should be known

#### **PERMEATION**

This refers to the process of a chemical moving through a protective glove, which is a result of the chemicals being absorbed at a molecular level through the contacted surface of the glove. This differs from "penetration" which occurs when a chemical leaks through seams, pinholes, and other manufacturing imperfections.

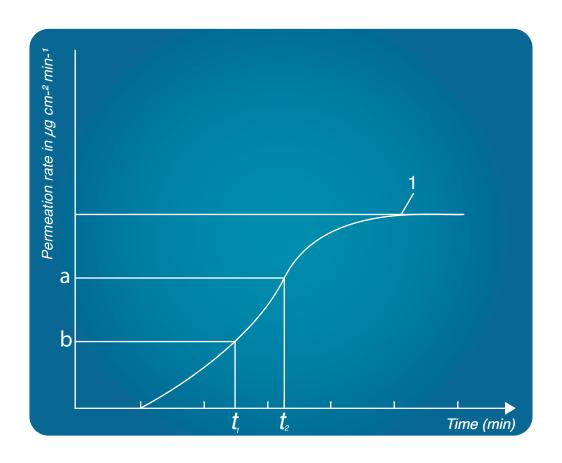
# **BREAKTHROUGH TIME (BTT)**

This is one of the parameters used to measure permeation, it indicates how long a glove can be used before different chemicals permeate through the material. The test to measure BTT involves a chemical being applied to the glove surface, we then measure the time taken for said chemical to be detected at a molecular level.

### **PERMEATION RATE**

This is the measure used to quantify the movement of a chemical as it permeates through the surface of the glove. During the usage of a glove in a chemical application, the glove material may become exposed to the chemical in use. This in turn may cause the physical properties of the glove to degrade as a result of the chemical absorption. Therefore it is very important to choose an appropriate glove for the desired application.



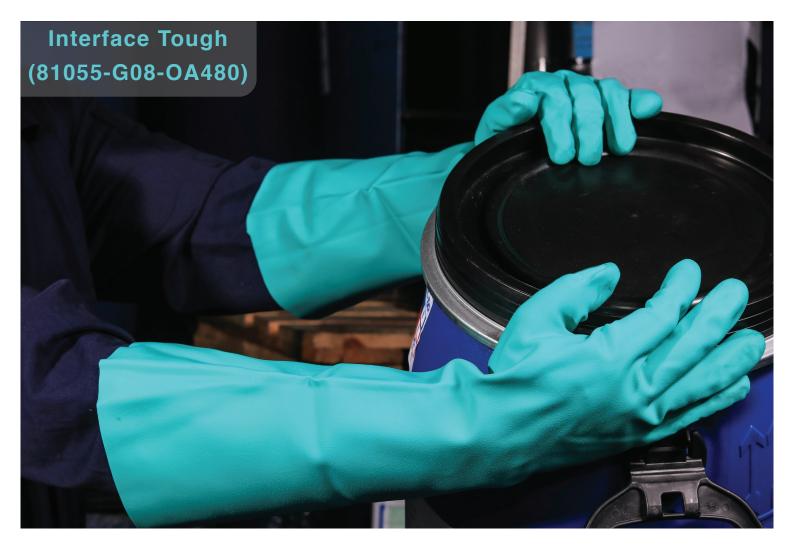


- Y Permeation rate in μg cm-2 min-1
- t Time (min)
- 1 Steady-state permeation
- a normalized permeation rate (NPR)
- b minimum detectable permeation rate (MDPR)
- t<sub>2</sub> normalized breakthrough time (NBT)
- Minimum detectable permeation rate This refers to the lowest permeation rate that could be measured by the permeation testing equipment.
- Normalized permeation rate A calculation which tells us the permeation rate at 1 μg/cm²/min by using the actual permeation results.
- Steady state permeation rate This is the point where the liquid passes through the glove material, continuously at a constant permeation after breakthrough.

# **DEGRADATION**

This occurs due to a reduction in one or more of a material's physical properties after it has been exposed to a chemical. Once absorbed, signs of degradation can appear in the form of flaking, swelling, disintegration, embrittlement, and hardening or softening of the glove.

% Degradation	Performance	Code Ltter
0 - 30	Excellent	Е
31 - 60	Good	G
61 - 90	Fair	F
>90	Poor	Р





Chemical   CAS NO.				rface S		Interface Plus 28 UL (81028-G08-WA300B)			s 38 UL			
Companies   Comp	Chemical	CAS NO.			Degradation %				Degradation %			Degradation %
March   Charles   March	ORCANIC ACIDS		lovest (lilli)	raung		ľ	owest (mm)	rating		iowest (iiiii)	running	
Aceta And, 10%		64 10 7	22	- 1	D		21	2	D	07	2	_
Aceta And. 20% Aceta				6								
Hydrochior Acid. 10	Acetic Acid, 20%	64-19-7	>480					6			6	
Pythorophotic Acid. 10%   Pythorophotic Ac	Acetic Acid, 25%	64-19-7	>480	6	Е		>480	6	Е	>480	6	Е
Hydrochrox Act, 37%   Nitr. Act, 40%	INORGANIC ACID	1 1										
Hydrochior's Acid. 37%, Nath. Acid. 40%, 7674-70-10, 7675-77-2 200 S. E. 270	Hydrochloric Acid, 10%	7647-01-0	>480	6	Е		>480	6	Е	>480	6	Е
Nitric Acid, 10% Nitric Acid, 69% Sulphuric Acid, 69% Ammonium Hydroxide, 29% Ammonium Hydroxide, 29% Ammonium Hydroxide, 59% Sodium Hydroxide, 59												
Nitric And, 65% Sujphura Acid, 40% Sujphura Acid, 40% 7684-93-9 3480 6 E 34	*											
Sulphura Acid, 40%   Sulphura Acid, 50%   F864-93-9	•			6								
Sulphura Acid, 60%   Fost-19-9-9   Tost-19-9-9   Tost-19	•			6								
Suphum Acid, 96%   A   C   C   C   C   C   C   C   C   C												
Ammonium Hydroxide, 25%   130-24-6   310-34-8   340   6   E   340   6		7664-93-9	23	2	Р		31	2	F	159	4	G
Pottasian Hydroxide, 90%   1310-98-3   5480   6   E   5480   6	ALKALIS	1 1										
Sodium Hydroxide, 49%   Sodium Hydroxide, 29%   Sodi												
Sodium Hydroxide, 20%   1310-73-2   >480   6   E												
Sodium hydroxide, 50%   1310-73-2   3480   6   E												
Butanol												
Butanol   96%   6417-5   5480   6   6   71-36-3   5480   6   6   7480   6   6   7480   6   6   7480   6   74	AL COURT	1 1										
Ethanol, 98% 64-17-5 180 Propyl Alcohol/Propan2-ol) 67-83-0		1 1										
So Propy  Alcohol(Propan-2-d)   67-65-1   7 0   F   3480   6   E												
Methanol   Fropan   1 ol   7   238   7   2480   6   6   6   2   3480   6   E												
Propan - 1 - ol   Propan - ol   Prop												
Acetone	•		_									
Cyclohexanone   108-94-1   108-93-3   107-87-9   107-	KETONES	1 1										
Cyclohexanone   108-94-1   108-93-3   107-87-9   107-	Acetone	67-64-1	<1	0	Р		<1	0	Р	<1	0	Р
Methyl Propyl ketone												
### ALDEHYDES  Formaldehyde, 37%  50-00-0  ### Solution										10		
Formaldehyde, 37%	Methyl Propyl ketone	107-87-9	3	0	Р		3	0	Р	7	0	Р
ESTERS  Ethyl Acetate  141-78-6  0 0 P  <  0   P	ALDEHYDES	1 1										
Ethyl Acetate	Formaldehyde, 37%	50-00-0	>480	6	Е		>480	6	Е	>480	6	Е
ALIPHATIC SOLVENTS       110-82-7 110-54-3 3480 6 E	ESTERS	1 1										
ALIPHATIC SOLVENTS       110-82-7 110-54-3 3480 6 E	Ethnil Apatota	141 70 0	0					0		4	0	
Cyclohexane   110-82-7   110-82-7   110-54-3   110-54-3   142-82-5   142-8	Etnyl Acetate	141-78-6	U	U	P	ı	<1	0	-	4	U	F
N - Hexane   110-54-3   142-82-5   3480   6   E	ALIPHATIC SOLVENTS	1 1										
N- Hexane   110-54-3   142-82-5   3480   6   E	Cyclohexane	110-82-7	>480	6	Е		>480	6	Е	>480	6	Е
AROMATIC SOLVENTS	n - Hexane	110-54-3		6								
Toluene Xylene Tilouene Xylene Tilouene Xylene Tilouene 1330-20-7 Tilouene 1330-20-7 Tilouene 1330-20-7 Tilouene 1330-20-7 Tilouene 1330-20-7 Tilouene 1330-20-7 Tilouene 100 F 9 0 F 28 1 F 1 0 P 1 0	n- Heptane	142-82-5	>480	6	Е		>480	6	G	>480	6	Е
Xylene	AROMATIC SOLVENTS	1 1										
Xylene	Toluene	108-88-3	<u>~1</u>	0	F		<i>~</i> 1	0	F	6	0	F
Thinner Turpentine White Spirit  AMINES  Diethyl Amine  Toth Dichloromethane  Tydrogen Peroxide, 30%  PETROLEUM DERIVATIVES  November 2015  N												
White Spirit       64742-82-1       100       3       G       300       5       E       >480       6       E         AMINES       109-89-7       <1	•									1		
AMINES  Diethyl Amine	• •											
Diethyl Amine       109-89-7       <1	white Spirit	64742-82-1	100	3	G		300	5	Е	>480	6	E
CHLORINATED SOLVENTS         75-09-2         1         P         1         0         P         1         0         P         1         0         P         1         0         P         1         0         P         1         0         P         1         0         P         1         0         P         1         0         P         1         0         0         P         1         0 </td <td>AMINES</td> <td>1 1</td> <td></td>	AMINES	1 1										
Dichloromethane         75-09-2         <1	Diethyl Amine	109-89-7	<1	0	Р		<1	0	Р	12	1	Р
PEROXIDES         Hydrogen Peroxide, 30%       7722-84-1       >480       6       G       >480       6       E       >480       6       E         PETROLEUM DERIVATIVES       8008-20-6       100       3       E       >480       6       E       >480       6       E         Diesel Fuel       68334-30-5       98       3       E       >480       6       E       >480       6       E	CHLORINATED SOLVENTS											
Hydrogen Peroxide, 30%  PETROLEUM DERIVATIVES  Kerosene Diesel Fuel  B008-20-6 68334-30-5  B008-20-6 98 3 E 98 3 E 98 6 E 9480 6 E	Dichloromethane	75-09-2	<1	0	Р		<1	0	Р	<1	0	Р
Hydrogen Peroxide, 30%  PETROLEUM DERIVATIVES  Kerosene Diesel Fuel  B008-20-6 68334-30-5  B008-20-6 98 3 E 98 3 E 98 6 E 9480 6 E	PEROXIDES											
PETROLEUM DERIVATIVES           Kerosene         8008-20-6         100         3         E         >480         6         E         >480         6         E           Diesel Fuel         68334-30-5         98         3         E         >480         6         E         >480         6         E		7700 04 4	. 400				- 400	_			_	_
Kerosene     8008-20-6     100     3     E     >480     6     E     >480     6     E       Diesel Fuel     68334-30-5     98     3     E     >480     6     E     >480     6     E		1122-84-1	>480	б	G		>480	б	E	>480	б	E
Diesel Fuel 68334-30-5 98 3 E >480 6 E >480 6 E		1 1										

			face To		Interface Plus 38 FL (82038-M00-GA330)		Inte: (8203)			
Chemical	CAS NO.	BTT lowest (min)	CE rating	Degradation %	BTT lowest (min)	CE rating	Degradation %	BTT lowest (min)	CE rating	Degradation %
ORGANIC ACIDS	1 1									
Acetic Acid - Glacial	64-19-7	182	4	F	87	3	Р	49	2	Р
Acetic Acid, 10%	64-19-7	>480	6	E	>480	6	E	>480	6	E
Acetic Acid, 20% Acetic Acid, 25%	64-19-7 64-19-7	>480 >480	6 6	E	>480 >480	6 6	E	>480 >480	6 6	E
INORGANIC ACID	01107	7 100		_	2 100		_	7 100		_
Hydrochloric Acid, 10%	7647-01-0	>480	6	Е	>480	6	Е	>480	6	Е
Hydrochloric Acid, 37%	7647-01-0	100	3	E	>480	6	E	>480	6	E
Nitric Acid, 40%	7697-37-2	>480	3	Е	100	3	Е	>480	6	Е
Nitric Acid, 10% Nitric Acid, 65%	7697-37-2 7697-37-2	>480	6	E F	>480	6	E	>480	6	E
Sulphuric Acid, 40%	7664-93-9	>480	6	E	48 >480	6	E	53 >480	2 6	E
Sulphuric Acid, 50%	7664-93-9	>480	6	Е	>480	6	Е	>480	6	Е
Sulphuric Acid, 96%  ALKALIS	7664-93-9	253	5	G	106	3	G	80	3	F
Ammonium Hydroxide, 25%	1336-21-6	>480	6	Е	>480	6	Е	307	5	Е
Pottasium Hydroxide, 50%	1310-58-3	6.5	6	E	>480	6	E	>480	6	E
Sodium Hydroxide, 40%	1310-73-2	>480	6	Е	>480	6	Е	>480	6	Е
Sodium Hydroxide, 20% Sodium Hydroxide, 50%	1310-73-2 1310-73-2	>480 >480	6 6	E	>480 >480	6 6	E	>480 >480	6 6	E
Socium Hydroxide, 50%	1310-73-2	>400	0	_	>400	O		>400	O	
ALCOHOLS	1 1									
Butanol	71-36-3	>480	6	Е	>480	6	G	>480	6	E
Ethanol, 96%	64-17-5 67-63-0	>480	6	E	>480 >480	6 6	E E	>480 >480	6	G E
Iso Propyl Alcohol(Propan-2-ol) Methanol	67-53-0 67-56-1	>480	6	E G	31	2	F	26	1	F
Propan - 1 - ol	71-23-8	>480	6	E	>480	6	Е	>480	6	Е
KETONES	1 1									
Acetone	67-64-1	6	0	F	<1	0	Р	<1	0	F
Cyclohexanone Methyl ethyl ketone	108-94-1 78-93-3	92	3	P F	52 <1	0	P F	17	0	P P
Methyl Propyl ketone	107-87-9	22	1	P	8	0	Р	<1 5	0	Р
ALDEHYDES										
Formaldehyde, 37%	50-00-0	>480	6	Е	>480	6	Е	>480	6	Е
ESTERS										
Ethyl Acetate	141-78-6	22	1	F	<1	0	Р	<1	0	Р
ALIPHATIC SOLVENTS	1 1									
Cyclohexane	110-82-7	>480	6	Е	>480	6	Е	>480	6	Е
n - Hexane n- Heptane	110-54-3 142-82-5	>480	6 6	E	>480 >480	6	E	>480	6	E E
n- neptane	142-02-3	>480	0	-	>460	Ь		>480	6	
AROMATIC SOLVENTS										
Toluene	108-88-3	10	1	F	12	1	F	<1	0	Р
Xylene Thinner	1330-20-7	155	4	G	24	0	F	8 <1	0	P P
Turpentine	8006-64-2	>480	6	Е	>480	6	Е	>480	6	Е
White Spirit	64742-82-1	>480	6	Е	>480	6	Е	>480	6	Е
AMINES	1 1									
Diethyl Amine	109-89-7	42	2	F	<1	0	Р	<1	0	F
CHLORINATED SOLVENTS										
Dichloromethane	75-09-2	<1	0	Р	<1	0	Р	<1	0	Р
PEROXIDES										
Hydrogen Peroxide, 30%	7722-84-1	>480	6	Е	>480	6	Е	>480	6	Е
PETROLEUM DERIVATIVES										
Kerosene Diesel Fuel	8008-20-6 68334-30-5	>480 >480	6 6	E E	>480 >480	6 6	E	>480 >480	6 6	E E
Petrol Unleaded	8006-61-9	>480	6	E	>480 130	4	E	>480 100	3	E

			Interface Elite 30 Interface Elite 40 (82030-M00-BA310) (82040-M00-CA310)				Interf				
Chemical	CAS NO.	BTT lowest (min)	CE rating	Degradation %	BTT lowest (n	CE in) ratin	Downadation ()		BTT lowest (min)	CE rating	Degradation %
ORGANIC ACIDS		1011001 (111111)									
Acetic Acid - Glacial	64-19-7	34	2	Р		20 1	Р		76	3	Р
Acetic Acid, 10%	64-19-7	>480	6	E	>4				>480	6	E
Acetic Acid, 20%	64-19-7	>480	6	E	>4				>480	6	E
Acetic Acid, 25%	64-19-7	>480	6	Е	>4				>480	6	Е
INORGANIC ACID	1 1										
Hydrochloric Acid, 10%	7647-01-0	>480	6	Е	>4	30 6	Е		>480	6	Е
Hydrochloric Acid, 37%	7647-01-0	>480	6	E	>4				>480	6	E
Nitric Acid, 40%	7697-37-2	326	5	G		26 5			>480	5	Е
Nitric Acid, 10%	7697-37-2	>480	6	Е	>4	30 6	E		>480	6	Е
Nitric Acid, 65%	7697-37-2	20	- 1	Р		29 1	Р		45	2	Р
Sulphuric Acid, 40%	7664-93-9	>480	6	Е	>4				>480	6	Е
Sulphuric Acid, 50%	7664-93-9 7664-93-9	>480	6	Е	>4				>480	6	Е
Sulphuric Acid, 96%  ALKALIS	7004-93-9	46	2	Р	2	58 5	F		84	3	F
	4000 04 0	400							100		
Ammonium Hydroxide, 25%	1336-21-6 1310-58-3	126	4 6	G E		78 3 30 6			>480	6 6	Е
Pottasium Hydroxide, 50% Sodium Hydroxide, 40%	1310-58-3 1310-73-2	>480 >480	6	E	>4				>480 >480	6	E E
Sodium Hydroxide, 40% Sodium Hydroxide, 20%	1310-73-2	>480	6	E	>4				>480	6	E
Sodium Hydroxide, 50%	1310-73-2	>480	6	E	>4				>480	6	E
	1 1										
ALCOHOLS	1 1					20			100		
Butanol	71-36-3	>480	6	E	>4				>480	6	E
Ethanol, 96%	64-17-5	>480	6	F	>4				>480	6	G
Iso Propyl Alcohol(Propan-2-ol)	67-63-0	102	3	E	>4				>480	6	E
Methanol	67-56-1	480	0 6	E G	>4	15 1 30 6	E G		13 480	6	G
Propan - 1 - ol	71-23-8	400		G	74	0	G		400	0	G
KETONES	1 1										
Acetone	67-64-1	<1	0	F		<1 0	F		<1	0	Р
Cyclohexanone	108-94-1	<1	0	Р		6 0			<1	0	Р
Methyl ethyl ketone	78-93-3	<1	0	Р		<1 0			<1	0	Р
Methyl Propyl ketone	107-87-9	<1	0	Р		<1 0	Р		<1	0	Р
ALDEHYDES	1 1										
Formaldehyde, 37%	50-00-0	>480	6	Е	>4	30 6	Е		>480	6	Е
ESTERS	1 1										
LOTENO	1 1										
Ethyl Acetate	141-78-6	<1	0	Р		<1 0	Р		<1	0	Р
ALIPHATIC SOLVENTS	1 1										
Cyclohexane	110-82-7	- 400	C	-	>4	20 6	Е		- 400	C	Е
n - Hexane	110-52-7	>480 >480	6 6	E E	>4				>480 >480	6 6	E
n- Heptane	142-82-5	>480	6	F		75 4			>480	6	E
		7 .00					_		7 .50		
AROMATIC SOLVENTS	1 1										
Toluene	108-88-3	<1	0	Р		<1 0	F		<1	0	F
Xylene	1330-20-7	1	0	Р		3 0	F		1	0	F
Thinner		<1	0	F		<1 0			<1	0	Р
Turpentine	8006-64-2	>480	6	Е	>4				>480	6	Е
White Spirit	64742-88-7	>480	6	G	>4	30 6	Е	H	>480	6	Е
AMINES	1 1										
Diethyl Amine	109-89-7	<1	0	F		1 0	F	Н	<1	0	F
CHLORINATED SOLVENTS											
Dichloromethane	75-09-2	<1	0	Р		1 0	Р		<1	0	Р
PEROXIDES											
Hydrogen Peroxide, 30%	7722-84-1	>480	6	Е	>4	30 6	Е		>480	6	Е
PETROLEUM DERIVATIVES											
Kerosene	8008-20-6	>480	6	Е	>4				>480	6	Е
Diesel Fuel	68334-30-5	>480	6	E	>4				>480	6	E
Petrol Unleaded	8006-61-9	60	3	G		70 3	G		80	3	Е
		-							_		

			rface FI		MOLOGY	Interface Prime (8C028-M00-GA330)		Inte (8102				
Chemical	CAS NO.	BTT lowest (min)	CE rating	Degradation %		BTT lowest (min)	CE rating	Degradation %		BTT lowest (min)	CE rating	Degradation %
ORGANIC ACIDS												
Acetic Acid - Glacial	64-19-7	69	3	Р		40	2	Р		11	2	Р
Acetic Acid, 10%	64-19-7	>480	6	E		>480	6	E		>480	6	E
Acetic Acid, 20% Acetic Acid, 25%	64-19-7 64-19-7	>480 >480	6 6	E		>480 >480	6 6	E		>480 >480	6 6	E E
INORGANIC ACID	04-19-7	>400	0	_		<i>&gt;</i> 400	0	_		7400	U	
Hydrochloric Acid, 10%	7647-01-0	>480	6	Е		>480	6	Е		>480	6	Е
Hydrochloric Acid, 37%	7647-01-0	>480	6	E		>480	6	E		>480	6	Ē
Nitric Acid, 40%	7697-37-2	>480	6	G		>480	6	Е		>480	6	Е
Nitric Acid, 10% Nitric Acid, 65%	7697-37-2 7697-37-2	>480	6	Е		>480	6	Е		>480	6	Е
Sulphuric Acid, 40%	7664-93-9	41 >480	2 6	F		46 >480	6	P E		>480	6	P E
Sulphuric Acid, 50%	7664-93-9	>480	6	E		>480	6	E		>480	6	E
Sulphuric Acid, 96%	7664-93-9	89	3	G		23	2	Р		4	0	Р
ALKALIS												
Ammonium Hydroxide, 25%	1336-21-6	>480	6	G		64	3	E		15 480	1 6	E E
Pottasium Hydroxide, 50% Sodium Hydroxide, 40%	1310-58-3 1310-73-2	>480 >480	6	E E		480 >480	6	F G		351	5	E
Sodium Hydroxide, 20%	1310-73-2	>480	6	E		>480	6	F		>480	6	Е
Sodium Hydroxide, 50%	1310-73-2	>480	6	Е		>480	6	G		>480	6	Е
ALCOHOLS												
Butanol	71-36-3	>480	6	Е		>480	6	Е		>480	6	G
Ethanol, 96%	64-17-5	>480	6	G		>480	6	G		>480	6	G
Iso Propyl Alcohol(Propan-2-ol)	67-63-0	>480	6	Е		>480	6	Е		8	0	G
Methanol Propan - 1 - ol	67-56-1 71-23-8	31 >480	6	G F		11 >480	1 6	F		480	6	F G
KETONES						- 7 .00						
Acetone	67-64-1	<1	0	Р		1	0	Р		1	0	Р
Cyclohexanone	108-94-1	20	1	P		8	1	P		5	0	Р
Methyl ethyl ketone	78-93-3	<1	0	Р		1	0	Р		1	0	F
Methyl Propyl ketone	107-87-9	7	0	Р		1	0	Р		1	0	Р
ALDEHYDES												
Formaldehyde, 37%	50-00-0	>480	6	Е		>480	6	Е		>480	6	Е
ESTERS												
Ethyl Acetate	141-78-6	1	0	Р		2	0	Р		3	0	Р
ALIPHATIC SOLVENTS												
Cyclohexane	110-82-7	>480	6	Е		>480	6	Е		>480	6	Е
n - Hexane	110-54-3 142-82-5	>480	6	E		>480	6	E F		>480	6 4	G G
n- Heptane	142-62-5	>480	6	G		>480	6	-		120	7	u
AROMATIC SOLVENTS												
Toluene	108-88-3	4	0	Р		4	0	F		1	0	F
Xylene Thinner	1330-20-7	18	0	F		18 <1	0	F		1	0	F
Turpentine	8006-64-2	>480	6	E		>480	6	E		>480	0	Ē
White Spirit	64742-88-7	>480	6	Е		>480	6	Е		>480	6	G
AMINES												
Diethyl Amine	109-89-7	<1	0	F		1	0	Р		1	0	F
CHLORINATED SOLVENTS												
Dichloromethane	75-09-2	<1	0	Р		1	0	Р		1	0	Р
PEROXIDES												
Hydrogen Peroxide, 30%	7722-84-1	>480	6	G		>480	6	Е		91	3	Е
PETROLEUM DERIVATIVES	7,22 07 1	7400				2 100						
Kerosene Diseal Fuel	8008-20-6 68334-30-5	>480	6	E		>480	6	E		>480 >480	6	E E
Diesel Fuel Petrol Unleaded	68334-30-5 8006-61-9	>480	4	E G		>480 70	6 3	G G		>480 50	2	G
		.23										

Chemical   CAS NO.     CAS N			Keto Resister (51028-M00-XA330)								
Butanol   Sthanol, 98%   Iso Propyl Alcohol (Propan-2-ol)   Methanol   Propan - 1 - ol   Propan - 1	Chemical	CAS NO.			Degradation %						
Ethanol, 98% 64-17-5 98 - 480 6 G G G G G G G G G G G G G G G G G G	ALCOHOLS										
Iso Propy  Alcohol (Propan-2-ol)   Afficient   Affic											
Propan = 1 - ol   Propan = 1	•										
Acetone											
Acetone Cyclohexanone Methyl ketone Methyl ketone T8-93-3 Methyl ketone T8-93-1 Details Teach Table Tabl	1 Topan 1 Oi	71200	40		G						
Cyclohexanone         108-94-1         78-93-3         780         6         E           Methyl Propyl ketone Isophonrone         107-87-9         120         2         x           Isophonrone         78-59-1         20         2         x           ALDEHYDES           Formaldehyde, 37%         50-00-0         >480         6         E           ESTERS           Ethyl Acetate         141-78-6         -480         6         G           ALIPHATIC SOLVENTS         110-82-7         -480         6         E           Cyclohexane         110-54-3         -480         6         E           n - Hexane         110-54-3         -480         6         E           AROMATIC SOLVENTS           Toluene         108-88-3         -480         6         E           AROMATIC SOLVENTS           Toluene         108-88-3         -480         6         E           Toluene         108-88-3         -480         6         E           Toluene         107-025         -480         6         E           Toluene         1070-25         <	KETONES										
Methyl propyl ketone Methyl propyl ketone lapphonrome         78-93-3 107-87-9 20 2 x           Laphonrome         78-59-1           Laphonrome         78-59-1           Laphonrome         78-59-1           Laphonrome         20 2 x           Laphonrome         10 28-7 y           Laphonrome         10 28-7 y           Laphonrome         10 42-5 y           Laphonrome				_							
Sophonrone											
### ALDEHYDES Formaldehyde, 37%  ### ESTERS											
So-00-0		70 00 1	۷	2	^						
ESTERS  Ethyl Acetate  ALIPHATIC SOLVENTS  Cyclohexane n - Hexane n - Hexane n - Heptane  110-82-7 110-54-3 n - Heptane  110-82-5 142-82-5  AROMATIC SOLVENTS  Toluene Xylene 130-20-7 Thinner 130-20-7 Thinner 170-10-1 170-20-5 124 170-20-5 124 170-20-5 124 170-20-5 124 170-20-5 124 170-20-5 124 170-20-5 124 170-20-5 124 170-20-5 124 170-20-5 124 170-20-5 124 170-20-5 124 170-20-5 180 180 180-6-6-2 180 180-6-6-2 180 180-6-6-2 180 180-6-6-2 180 180-6-6-2 180 180-6-6-2 180 180-6-6-2 180 180-6-6-2 180 180-6-6-1 180-6-6 180 180-6-6 180 180-6-6 180 180-6-6 180 180-6-6 180 180 180-6 180 180-6 180 180-6 180 180-6 180 180-6 180 180-6 180 180 180-6 180 180-6 180 180-6 180 180-6 180 180-6 180 180-6 180 180 180-6 180 180-6 180 180-6 180 180-6 180 180-6 180 180-6 180 180 180 180 180 180 180 180 180 180		50-00-0	>48	0 6	Е						
### ALIPHATIC SOLVENTS  Cyclohexane n - Hexane n - Heytane  ### 110-54-3 n - Heytane  ### 110-54-3 n - Heytane  ### 110-54-3 142-82-5  ### 130-20-7 Thinner  ### 130-20-7 Thinner  ### 100-42-5 Terahydrofruran  ### 100-42-5 ### 140-42-5 ### 100-42-5 ### 140-42-5 ### 100-42-5 ### 140-42-5 ###											
110-82-7		141-78-6	>48	0 6	G						
110-54-3	ALIPHATIC SOLVENTS										
142-82-5	•										
Toluene Xylene 1330-20-7											
Xylene											
Thinner Turpentine Turpentine Terahydrofuran Styrene Styrene White Spirit 99% Nitrobenzene  SULPHUR-BASED CHEMICALS  Carbon disulfide Tetrahydrothiophene  Tirethylamine Diethyl Amine  Diethyl Amine  Dimethylformamide  CHLORINATED SOLVENTS  Dichloromethane 1,2 Dichloroethane 1,3 Dichloroethane 1,4 Dichloroethane 1,5 Dichloroethane 1,6 Diesel Fuel PEROXIDES  Hydrogen Peroxide, 30%  PETROLEUM DERIVATIVES  Kerosene Diesel Fuel Petrol Unleaded  OTHERS	Toluene	108-88-3	>48	0 6	Е						
Turpentine Terahydrofuran Styrene White Spirit 99% Nitrobenzene  Carbon disulfide Tetrahydrothiophene  MINIES  Triethylamine Diethyl Amine  CHLORINATED SOLVENTS  Dichloromethane 1,2 Dichloroethane 1,3 Dichloromethane 1,4 Diethyl Minie 107-13-1  PEROXIDES  Hydrogen Peroxide, 30%  PETROLEUM DERIVATIVES  Kerosene Diesel Fuel Petrol Unleaded  OTHERS	•	1330-20-7		_							
Styrene	Turpentine	8006-64-2									
White Spirit       99% Nitrobenzene       64742-88-7       306-770       306-770       3480       6       E         SULPHUR-BASED CHEMICALS         Carbon disulfide Tetrahydrothiophene       102211       3480       6       x         AMINES         Triethylamine Diethyl Amine       121-44-8       3480       6       x         AMIDES       3       G         Dimethylformamide       68-12-2       25       2       x         CHLORINATED SOLVENTS         Dichloromethane       75-09-2       3480       6       x         NITRILES       75-09-2       3480       6       x         Acetonitriles       75-05-08       3480       6       x         Acrylonitrile       107-13-1       3480       6       x         PEROXIDES       7722-84-1       3480       6       G         Hydrogen Peroxide, 30%       7722-84-1       3480       6       E         Diesel Fuel       68334-30-5       3480       6       E         Petrol Unleaded       8006-61-9       3480       6       E											
Carbon disulfide   Tetrahydrothiophene   T	White Spirit										
Carbon disulfide Tetrahydrothiophene       102211	99% Nitrobenzene	806-770	>48	6	Х						
Tetrahydrothiophene 110-01-0 >480 6 x  AMINES  Triethylamine 121-44-8 109-89-7 81 3 G  AMIDES  Dimethylformamide 68-12-2 25 2 x  CHLORINATED SOLVENTS  Dichloromethane 1,2 Dichloroethane 107-06-2 >480 6 x  NITRILES  Acetonitriles 75-09-2 107-06-2 >480 6 x  NITRILES  Acetonitriles 75-05-08 107-13-1 >480 6 F  PEROXIDES  Hydrogen Peroxide, 30% 7722-84-1 >480 6 G  PETROLEUM DERIVATIVES  Kerosene Diesel Fuel Petrol Unleaded 8006-61-9 \$480 6 E  OTHERS	SULPHUR-BASED CHEMICALS										
## AMINES  Triethylamine											
Diethyl Amine											
AMIDES         Dimethylformamide       68-12-2       25       2       x         CHLORINATED SOLVENTS       75-09-2       480       6       G         1,2 Dichloroethane       107-06-2       >480       6       x         NITRILES       75-05-08       >480       6       F         Acetonitriles       75-05-08       >480       6       F         Acrylonitrile       107-13-1       >480       6       x         PEROXIDES       7722-84-1       >480       6       G         PETROLEUM DERIVATIVES       8008-20-6       >480       6       E         Diesel Fuel       68334-30-5       >480       6       E         Petrol Unleaded       8006-61-9       >480       6       E		121-44-8	>48								
Dimethylformamide       68-12-2       25       2       x         CHLORINATED SOLVENTS       75-09-2       480       6       G         Dichloromethane       75-09-2       480       6       x         NITRILES       75-05-08       3480       6       F         Acetonitriles       75-05-08       3480       6       F         Acrylonitrile       107-13-1       3480       6       X         PEROXIDES       7722-84-1       3480       6       G         Rerosene       8008-20-6       3480       6       E         Diesel Fuel       68334-30-5       3480       6       E         Petrol Unleaded       8006-61-9       3480       6       E		109-89-7	8	1 3	G						
CHLORINATED SOLVENTS         Dichloromethane       75-09-2       480       6       G         1,2 Dichloroethane       107-06-2       >480       6       x         NITRILES         Acetonitriles       75-05-08       >480       6       F         Acrylonitrile       107-13-1       >480       6       x         PEROXIDES         Hydrogen Peroxide, 30%       7722-84-1       >480       6       G         PETROLEUM DERIVATIVES       8008-20-6       >480       6       E         Diesel Fuel       68334-30-5       >480       6       E         Petrol Unleaded       8006-61-9       >480       6       E         OTHERS											
Dichloromethane       75-09-2       480       6       G         1,2 Dichloroethane       107-06-2       >480       6       x         NITRILES         Acetonitriles       75-05-08       >480       6       F         Acrylonitrile       107-13-1       >480       6       x         PEROXIDES         Hydrogen Peroxide, 30%       7722-84-1       >480       6       G         PETROLEUM DERIVATIVES         Kerosene       8008-20-6       5480       6       E         Diesel Fuel       68334-30-5       >480       6       E         Petrol Unleaded       8006-61-9       >480       6       E		68-12-2	2	2	Х						
1,2 Dichloroethane       107-06-2       >480       6       x         NITRILES         Acetonitriles       75-05-08       >480       6       F         Acrylonitrile       107-13-1       >480       6       x         PEROXIDES         Hydrogen Peroxide, 30%       7722-84-1       >480       6       G         PETROLEUM DERIVATIVES         Kerosene       8008-20-6       5480       6       E         Diesel Fuel       68334-30-5       5480       6       E         Petrol Unleaded       8006-61-9       5480       6       E         OTHERS	CHLORINATED SOLVENTS										
NITRILES         Acetonitriles       75-05-08       >480       6       F         Acrylonitrile       107-13-1       >480       6       x         PEROXIDES         Hydrogen Peroxide, 30%       7722-84-1       >480       6       G         PETROLEUM DERIVATIVES         Kerosene       8008-20-6       5480       6       E         Diesel Fuel       68334-30-5       5480       6       E         Petrol Unleaded       8006-61-9       5480       6       E				_							
Acrylonitrile 107-13-1 >480 6 x  PEROXIDES  Hydrogen Peroxide, 30% 7722-84-1 >480 6 G  PETROLEUM DERIVATIVES  Kerosene	,										
PEROXIDES           Hydrogen Peroxide, 30%         7722-84-1         >480         6         G           PETROLEUM DERIVATIVES           Kerosene         8008-20-6         >480         6         E           Diesel Fuel         68334-30-5         >480         6         E           Petrol Unleaded         8006-61-9         >480         6         E		75-05-08	>48		F						
Hydrogen Peroxide, 30%   7722-84-1   >480   6   G		107-13-1	>48	6	Х						
PETROLEUM DERIVATIVES       8008-20-6       >480       6       E         Kerosene       68334-30-5       >480       6       E         Petrol Unleaded       8006-61-9       >480       6       E             OTHERS		7700 04 4									
Kerosene       8008-20-6         Diesel Fuel       68334-30-5         Petrol Unleaded       8006-61-9             OTHERS             8008-20-6       3480         6       E         >480       6         E		//22-84-1	>48	6	G						
Diesel Fuel 68334-30-5 8006-61-9 5480 6 E  OTHERS		0000 00 0									
Petrol Unleaded 8006-61-9 >480 6 E  OTHERS				_							
40 0											
Acetone:Water (50:50) mixture 42 2 x	OTHERS										
	Acetone:Water (50:50) mixture		4	2 2	х						

Caution:
This data is based on glove specimens cut from the palm area and tested under controlled labor atory conditions. The chart is provided as a guide only. The suitability of a glove in a specific application and work environment must be verified by the users. This guide should not be construed as a warranty from DPL.



