CHEMICAL PROTECTION

Chemical hazards are not confined to the chemical industry. Many people, in a variety of sectors, are faced with chemical risks when handling products which are aggressive to a greater or lesser extent (oils, acids, solvents, etc.).

More than 100,000 chemical substances are now classfied (identfied by their CAS number).

In order to meet the wide variety of aggressive situations that exist, We offers a wide range of protective gloves designed using polymers, which behave differently and provide different protection according to the situation.

The results of chemical testing and the different chemical classifiation indices must not be seen as the only factors when selecting a glove. Actual usage conditions, the contact time with a given chemical, the concentration, the temperature, the usage frequency of a glove and the care conditions can affect glove performance. All of these factors should be taken into account when choosing the right glove.

THE GUIDE: 2 PERFORMANCE INDICATORS

To characterise the performance of the elastomers and plastics used to manufacture safety gloves, tests are carried out to determine the behaviour of these materials when confronted with the various families of chemical products.
We takes these different parameters into account to determine the relative performance of the different families of gloves and hence help you make the best possible choice.

1. PERMEATION TIMES

The permeation time for a given chemical product, *i.e.* the time taken for the chemical to penetrate the glove, at a molecular level; in some cases, there is no visible deterioration of the glove.

2. DEGRADATION INDEX

The degradation index of the glove in contact with a given chemical product, *i.e.* the degree of deterioration of the glove shown by an alteration of its physical properties (*e.g.* softening, hardening, etc.).

SELECT THE MOST APPROPRIATE CHEMICAL GLOVE FOR YOUR NEEDS USING THE THREE STAGES BELOW:

1 Identify which family of chemical products the substance you are handling belongs to ▼

2 Determine the most appropriate protective material for your specific application. ▼

YOU ARE HANDLING	CAS	EN374	PVC	NATURAL LATEX	NITRILE	POLY-CHLOROPRENE	BUTYL	FLUORO-ELASTOMER
			Common polymers*				Specific polymers**	
			RECOMMENDATION	• Light protection	•• Strong protection	••• Optimal protection		
ALCOHOLS (methanol 100%)	67-56-1	A		•	•	••	•••	••
KETONE (acetone 100%)	67-64-1	B		•		•	•••	
NITRILES (acetonitrile methyl cyanide 99%)	75-05-8	C				•	•••	•
CHLORINATED SOLVENTS (methylene chloride/dichloromethane 99%)	75-09-2	D						•
SULPHUR-BASED CHEMICALS (carbon disulphide 100%)	75-15-0	E			•			•••
AROMATIC SOLVENTS (toluene 100%)	108-88-3	F			•			•••
AMINES (diethylamine 98%)	109-89-7	G			•			••
ETHERS (tetrahydrofuran (THF) 100%)	109-99-9	H			•	•	•	•
ESTERS (ethyl acetate 99%)	141-78-6	I			•	•	•••	
ALIPHATIC SOLVENTS (heptane 99%)	142-82-5	J	•		•••	••		•••
ALKALIS (sodium hydroxide (soda) 40%)	1310-73-2	K	•••	•••	•••	•••	•••	•••
OXIDISING ACID (sulphuric acid 96%)	7664-93-9	L	•	•		••	•••	•••
OXIDISING ACID (nitric acid 65%)	7697-37-2	M	•	•••		•••	•••	•••
ORGANIC ACID (acetic acid 99%)	64-19-7	N	•	•		•••	•••	••
ORGANIC BASE (ammonia 25%)	1336-21-6	O	•	•	••		•••	••
PEROXYDE (hydrogen peroxide 30%)	7722-84-1	P	•••	•••	•••	•••	•••	•••
HYDROFLUORIC ACID (hydrogen ☒uoride 40%)	7664-39-3	S		•••		•••	•••	••
ALDEHYDE (formaldehyde 37%)	50-00-0	T	•••	•••	•••	•••	•••	•••
	STRENGTHS		Value for money Mechanical strength	Excellent flexibility Good puncture and tearing resistance Adapted to cold environment	Good puncture and abrasion resistance No risk of protein-related allergies	Good fiexibility Good thermal resistance	Excellent chemical resistance Flexible and elastic	High chemical resistance
	RESTRICTIONS		Not suitable for handling hot parts	Risk of allergies caused by the proteins in the natural latex	Not recommended for cold environments	Poor mechanical properties	Poor mechanical properties	

* The most frequently used materials for manufacturing chemical protection gloves.
** Protection targeted against certain aggressive chemical product families, these are more stringent than for standard materials.