Goldex® SINGER

PVC775
CHEMICAL GUIDE

ACTIFRESH®

Chemical Protection

CHEMICAL PRODUCTS		N°CAS	CODE RISQUE EUROPEEN	D.R	BTT	CLASS
ACETONE		67-64-1	V	NR	6	0
1,2 DICHLORO ETHANE	CA	107-06-2	T, CANCER	NR	4	0
1,2 DI CHLORO ETHANE 76% + PHENOL 24%				NT	21	1
1,2-DICHLORETHAN REINCST				NT	12	1
1-BUTANOL (BUTYL ALCOHOL)	S	71-36-3	X	NT	30	1
2.6-DIMETHYL - 4-HEPTANONE		108-83-8	X	G/E	>480	6
ACETALDEHYDE	CA,HH	75-07-0	XI	NR	6	0
ACETIC ACID (Glacial)		64-19-7		F	24	1
ACETONITRILE		75-05-8	T	NT	12	1
ACRYLAMIDE (50%)	S,CA,CS,EH	79-06-1	T,CANCER	G/E	>480	6
ACRYLIC ACID		79-10-7			38	2
AMMONIUM FLORIDE (40%)		12125-01-8		G/E	>480	6
AMMONIUM HYDROXIDE (< 30 %)		1336-21-6	X	G/E	>480	6
AMMONIUM HYDROXIDE (30 %)		1336-21-6				
AMYL ACETATE		628-63-7	V	NT	18	1
ANILINE	S,EH	62-53-3	T	G	65	3
BATTERY ACID		7664-93-9	Cx	G/E	>480	6
BENZALDEHYDE		100-52-7	X	NT	18	1
BENZENE	S,CA,CH	71-43.2	T,CANCER	NR	7	0
BUTOXY PROPANOL		5131-66-5	X	G/E	>480	6
BUTOXY TRIGLYCOL		143-22-6	X	G/E	>480	6
BUTYL ACETATE		123-86-4	V	NT	12	1
BUTYL CARBITOL SOLVENT		112-34-5	X	G/E	>480	6
BUTYL CELLOSOLVE SOLVENT		111-76-2	X	G/E	>480	6
BUTYL DIPROPASOL SOLVENT		29911-28-2	X	G/E	>480	6
BUTYL ETHYLENE		592-41-6	X	G/E	>480	6
BUTYL PROPASOL SOLVENT		5131-66-8	X	G/E	>480	6
BUTYRO LACTONE		96-48-0			88	3
CARBONE DISULFIDE		75-15-0			4	0
CARBON TETRA CHLORURE		56-23-5			23	1
CASTOR OIL		8001-79-4		G/E	>480	6
CAUSTIC POTASH (45%)		1310-58-3	C	G/E	>480	6
CAUSTIC SODA (50%)		1310-73-2	Cx	G/E	>480	6
CHLOROBENZENE		108-90-7	X	NT	10	0
CHLOROFORM	CA,CS,EH	67-66-3	X,CANCER	NT	4	0
CHROMIC ACID (50%)	CA	1333-82-0	Cx,SENS	G/E	>480	0
CHROMIUM TRIOXIDE	CA	1333-82-0	Cx,SENS	G/E	>480	6
CITRIC ACID (30%)		77-92-9	n.a.	G/E	>480	6
COOKING OIL				G/E	>480	6
CORN OIL				G/E	>480	6
CRESOL	S	1319.77-3	T,C	G/E	>480	6
CRESYLIC ACID	S	1319-77-3	T,C	G/E	>480	6
CYCLOHEXANE		110-82-7	V	NT	18	1
CYCLOHEXANONE	S	108-94-1	X	NT	63	3
CYCLOHEXANOL	S	108-93-0	X	G/E	>480	6
DETERGENT				G/E	>480	6
DI-BUTYL PHTALATE (D.B.P)	EH	84-74-2	XI	G/E	>480	6
DI-ISOBUTYL KETONE		108-83-8	X	G/E	>480	6
DI-ISOOCTYL PHTALATE (D.I.O.P)				G/E	>480	6
DIACETONE ALCOHOL				G/E	>480	6

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DIBUTYL PHTALATE				G/E	>480	6
DIESEL		77650-28-3	X	G/E	>480	6
DIETHANOLAMINE	S	111-42-2	XI	G/E	>480	6
DIETHYLAMINE	S	109-89-7	C,X	NR	6	0
DIETHYL ETHER		60-29-7		NR	4	0
DIETHYLENE GLYCOL MONOBUTYL ETHER		112-34-5	X	G/E	>480	6
DIETHYLENE GLYCOL MONOHEXYL ETHER		112-59-4	X	G/E	>480	6
DIETHYLENE GLYCOL MONOMETHYL ETHER		111-77-3	X	G/E	>480	6
DIETHYLENE GLYCOL MONOPROPYL ETHER		6881-94-3	X	G/E	>480	6
DIMETHYLACETAMIDE		127-19-5				
DIMETHYL FORMAMIDE (DMF)	S	68-12-2	X	NR	14	1
DIOCTYL PHTALATE (DI(2-ÉTHYL HEXYL) PHTALATE) (D.O.P)		117-81-7		G/E	>480	6
DIPROPASOL GLYCOL MONOBUTYL ETHER		29911-28-2	X	G/E	>480	6
DIPROPYLENE GLYCOL MONOBUTYL ETHER		29911-28-2	X	G/E	>480	6
DIPROPYLENE GLYCOL MONOPROPYL ETHER		29911-27-1	X	G/E	>480	6
EPOXIDISED SOYA BEAN OIL		8013-07-8		G/E	>480	6
ETHANOLAMINE		141-43-5	XI	G/E	>480	6
ETHOXYTRIGLYCOL		112-50-5	X	G/E	>480	6
ETHYL ACETATE		141-78-6	V	NR	6	0
ETHYL BUTANOL		97-95-0		G/E	>480	6
ETHYLENE GLYCOL		107-21-1	XI	G/E	>480	6
ETHYLENE GLYCOL MONOPROPYL ETHER	S	2807-30-9	X	G/E	>480	6
FORMALDEHYDE (37%)	CA,CS,HH	50-00-0	T,CANCER	G/E	>480	6
FORMIC ACID (90%)		64-18-6	Cx	G/E	>480	6
GENKLENE				NR	4	0
GLYCERINE		56-81-5		G/E	>480	6
GROUNDNUT OIL		8002-03-7		G/E	>480	6
HEXYLCARBITOL SOLVENT		112-59-4	X	G/E	>480	6
HEXYLCELLOSOLVE SOLVENT		112-25-4	X	G/E	>480	6
HYDRAZINE HYDRATE (85%)	S,CS,EH	302-01-2	Tx,C,CANCER	G/E	>480	6
CHLORHYDRIC ACID (10%)	EH	7647-01-0	XI	G/E	>480	6
CHLORHYDRIC ACID (30%)		7647-01-0		G/E	>480	6
CHLORHYDRIC ACID (37%)	EH	7647-01-0	C	NT	95	3
HYDROGEN PEROXID		7722-84-1		G/E	>480	6
HYDROGEN PEROXID (30 %)	EH	7722-84-1	C	G/E	>480	6
HYDROQUINONE		123-31-9		G/E	>480	6
IODOMETHANE	S,CA,CS	74-88-4	T,C,CANCER	NT	5	0
ISOAMYL ALCOHOL		123-51-3	X	F	45	2
ISO BUTYL ALCOHOL		78-83-1		NT	41	2
ISO BUTYL METHYL KETONE		108-70-1		NR	11	1
ISO PROPYL ALCOHOL		67-63-0		G	40	2
KEROSENE		8008-20-6	X	G/E	>480	6
KEROSENE (Paraffin)				NT	96	3
LACTIC ACID (85%)		50-21-5		G/E	>480	6
MALEIC ACID		110-16-7		G/E	>480	6
METHOXYTRIGLYCOL		112-35-6	X	G/E	>480	6
METHANOL	S	67-56-1	T	NT	50	2
METHYL ACETATE		79-20-9	V	NR	4	0
METHYL ACRYLATE				NR	3	0
METHYLIC ALCOHOL				NT	13	1
METHYL ETHYL KETONE		78-93-3		NR	4	0

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METHYL METHACRYLATE		80-62-6	X,SENS	NR	4	0
METHYLCARBITOL SOLVENT		111-77-3	X	G/E	>480	6
METHYLENE CHLORIDE	CA,CS,HH	75-09-2	T	NR	4	0
MILK				G/E	>480	6
MILK PRODUCTS (BUTTER, ETC…)				G/E	>480	6
MONOETHANOLAMINE		141-43-5		G/E	>480	6
MORPHOLIN	S	110-91-8	C,X	NT	26	1
MURIATIC ACID	EH	7647-01-0	X	G/E	>480	6
N,N DIMETHYL ACETAMIDE	S	127-19-5	X	NT	14	1
n-HEXANE		110-54-3		NR	8	0
n-OCTANOL		111-87-5	X	G/E	>480	6
NITRIC ACID (10%)		7697-37-2		G/E	>480	6
NITRIC ACID (65%)		7697-37-2		NT	70	3
NITRO BENZENE	S,EH	98-95-3	T	NT	34	2
NITRO METHANE		75-52-5	X	NT	15	1
OCTANE (Petrol or Gazoline)		111-65-9		NT	16	1
OIL-BASED PAINTS				G/E	>480	6
OLEIC ACID		112-80-1	n.a.	G/E	>480	6
OLIVE OIL		8001-25-0	n.a.	G/E	>480	6
ORTHO PHOSPHORIC ACID (85%)		7664-38-2		G/E	>480	6
OXALIC ACID		144-62-7		G/E	>480	6
PARAFFIN (52% DE CHLORINATION)				G/E	>480	6
PHENOL (76% IN H2O)		108-95-2				
PENTANE		109-66-0	V	NT	9	0
PETROL				NT	14	1
PERCHLORIC ACID (60%)		7601-90-3		G/E	>480	6
PHTALIC ACID DIBUTYL ESTER	EH	84-74-2	XI	G/E	>480	6
PROPANOL				NT	41	2
PROPETAMPHOS (50% IN ROH)		31218-83-4	X	G/E	>480	6
PROPOXY DIETHYLENE GLYCOL		6881-94-3	X	G/E	>480	6
PROPYL CARBITOL SOLVENT		6881-94-3	X	G/E	>480	6
PROPYL CELLOSOLVE SOLVENT		2807-30-9	X	G/E	>480	6
PROPYLENE GLYCOL MONOBUTYL ETHER		5131-66-8	X	G/E	>480	6
PYRIDINE		110-86-1	X	NR	10	0
SAFROTIN (50% IN ROH)		31218-83-4	X	G/E	>480	6
SODIUM HYDROXYDE (50%)		1310-73-2	Cx			
SODIUM HYPOCHLORITE (6%)		7681-52-9	C	G/E	>480	6
STYRENE	S,CA,CS	100-42-5	X	NT	12	1
SULPHURIC ACID (47%)		7664-93-9	Cx	G/E	>480	6
SULPHURIC ACID (Con.)		7664-93-9	Cx	NT	71	3
SULPHURIC ACID (30%)		7664-93-9		G/E	>480	6
TANNIC ACID (65%)		1401-55-4		G/E	>480	6
TERT-BUTYL AMINE		75-69-4		NT	72	3
TETRACHLOROETHYLENE	CA	127-18-4	X	P	11	1
TETRAHYDROFURAN		109-99-9	X	NT	8	0
TOLUENE	S	108-88-3	X	NR	13	1
TOLUENE EXTRA PURE		108--8-3				
TRICHLOROETHANE		79-00-5		P	14	1
TRICHLOROETHYLENE	CA	79-01-6	X	NR	5	0
TRICRESYL PHOSPHATE (TCP)		1330-78-5	T	G/E	>480	6
TRIETHANOLAMINE (TEA)		120-71-6	XI	G/E	>480	6
TRIXYLYL PHOSPHATZE (T.X.P)				G/E	>480	6
XYLENE		1330-20-7	X	NR	20	1

CHEMICAL RESISTANCE GUIDE
PERMEATION AND DEGRADATION DATA

Degradation is defined as a change or deterioration in one or more physical properties of a protective glove material due to contact with a chemical. These changes include flaking, swelling, disintegration, brittleness, discoloration, hardening and softening.

Testing is done by completely immersing one side of a glove sample into a test chemical for 30 minutes. The sample is then re-weighed after complete drying and is recorded as a percent change in weight.

Permeation is a process by which a chemical moves through a protective glove material on a molecular level. Permeation involves absorption of chemical molecules into the glove material surface then diffusion of the absorbed molecules in the glove material and finally desorption of the molecules from the opposite (inside) surface of the glove material.

Breakthrough time is defined in EN 374 Part III as the rate of permeation of a chemical through the glove sample which is equivalent to 1 micro gram (millionth of one gram) per square centimetre per minute (1ugm/cm^2/min).

MAKING SENSE OF THE DATA

The results herein are obtained under controlled laboratory conditions and are for guidance only. It is the intention to assist the user to make the correct choice of personal protective equipment. Actual conditions of end use are not simulated and it is the responsibility of the user to determine the risk and make the appropriate choice for protection against such risk. The manufacturer, the distributor and the sales agents accept no responsibility for a user's selection against particular risk. The manufacturer, the distributor and the sales agents do not imply any guarantee or responsibility from information provided that a particular product will suit specific end use.

HAZARD CODE FOR CHEMICALS

S Skin Notation. According to ACGIH, this chemical may permeate intact skin and cause toxic effects. For constant exposure, only with a permeation of more than 480 minutes can provide adequate protection needed to handle these highly toxic substances.

CA Causes cancer in animals as documented by the international Agency for Research on Cancer (IARC).

CH Causes cancer in humans as documented by the international Agency for Research on Cancer (IARC).

CS Suspected human carcinogen by ACGIH TLV Committee. The agent is carcinogenic in animals at dose levels and by routes which are relevant to worker exposure.

EH Chemical appears on the Extremely Hazardous List developed by the U.S. Environmental Protection Agency (EPA).

HH Chemical appears on the 1992 List of Highly Hazardous Chemicals, Toxics and Reactives. According to OSHA, this chemical presents a potential for a catastrophic event.

CAS NUMBER

The Chemical Abstract Services identification numbers provide unique identifiers for easy cross-reference to Material Safety Data Sheets (MSDS). Some chemicals are known by several widely used names. Some well known synonyms appear in this guide and have the same CAS Number.

EUROPEAN TOXICITY RISK CODE

The European "Guide to Classification and Marking of Hazardous Substances" established a labeling ordinance so that anyone handling a hazardous product knows the health risks. Hazardous products can cause injuries from inhalation, ingestion or skin contact after even a single exposure or form prolonged or repeated exposure. Based on toxicity information, the categories are:

EUROPEAN TOXICITY RISK CATEGORY

1. Extremely Dangerous, very toxic
Tx - Toxic

2. Very Dangerous
T - Toxic
Cx - Highly Carcinogen
CANCER - Known Carcinogen

3. Dangerous
C - Corrosive
X - Harmful
XI - Irritant
SENS - Allergen (Known Sensitizes)
CANCER - Suspected Carcinogen

4. Other
V - Potentially harmful
n.a. - No Risk information Available

DEGRADATION RATING

E	Excellent
G	Good
F	Fair
P	Poor
NR	Not Recommended
NT	Not Tested
G/E	A degradation test this chemical was not run. However, since its breakthrough time is greater than 480 mintes, the Degradation Rating is expected to be **good** to **excellent**.

BREAKTHROUGH TIME

Level	Time
0	1 - 10 minutes
1	11 - 30 minutes
2	31 - 60 minutes
3	61 - 120 minutes
4	121 - 240 minutes
5	241 - 480 minutes
6	greater than 480 minutes