



STC334E - Rev 6 – 17.08.2005

CATEGORY III CERTIFICATION

CE 0334

STANZOIL 334 - 337

CE-Type Examination Certificates

STANZOIL 334 : 0072/014/162/12/96/0675

STANZOIL 337 : 0072/014/162/12/96/0675/EX01 12 96

issued by the approved body nr. 0072

I.F.T.H. – Av. Guy de Collongue - F-69134 ECULLY CEDEX

Certificate of conformity of the Quality Assurance System

issued by the approved body nr. 0334

ASQUAL - 14, rue des Reculettes - F-75013 PARIS

These gloves conform to the provisions of Directive 89/686/EEC for protection against mechanical risks, contact heat and chemicals within the limit of the recommendations hereafter.

57, rue de Villiers - B.P. 190
92205 NEUILLY SUR SEINE Cedex - FRANCE
Tel : (33) 1 49 64 22 00 - Fax : (33) 1 49 64 24 29
www.mapa-professionnel.com

MAPA (U.K.) Ltd
Unit A - Halesfield 14 - TELFORD TF7 4QR
Tel (44) 1952 684 487 / Fax (44) 1952 580 959

MAPA®
PROFESSIONNEL

STANZOIL 334 - 337

DESCRIPTION AND GENERAL PROPERTIES

Liquidproof gloves made of **neoprene (polychloroprene)** rubber with **internal cotton knit**.

Natural latex layer between knit liner and neoprene layer for Stanzoil 337.

Curved fingers and contoured palm.

Anti-slip finish in hand area.

Guaranteed **without silicone**.

Conform to the FDA (Food and Drug Administration) regulation for **food contact**.

Reference	Colour	Glove Length for all sizes (in cm)*	Sizes available
Stanzoil 334	Blue/ Black	30.5	6 - 6 ½
			7 - 7 ½
			8 - 8 ½
			9 - 9 ½
Stanzoil 337	Blue/ Black	35.5	8 - 8 ½
			9 - 9 ½
			10 - 10 ½
			11 - 11 ½

* nominal values

Standard packaging :

- **12 pairs** in printed box including the information leaflet
- **72 pairs** per carton (48 pairs per carton for Stanzoil 337)

"CE"-TYPE EXAMINATION RESULTS



PROTECTION AGAINST CHEMICALS

According to EN 374 standard.
Liquidproof gloves. Permeation data : see the enclosed chemical resistance chart.

ACJKL

Acceptable Quality Level (AQL) : 4



PROTECTION AGAINST HEAT

Levels of performance according to EN 407 standard.

Only the mentioned test is relevant to the usage of the gloves.

x 2 x x x x

↳ **contact heat (0 to 4)**



PROTECTION AGAINST MECHANICAL RISKS

Levels of performance according to EN 388 standard.

3 1 2 1

↳ **puncture resistance (0 to 4)**

↳ **tear resistance (0 to 4)**

↳ **blade cut resistance (0 to 5)**

↳ **abrasion resistance (0 to 4)**

STANZOIL 334 - 337

SPECIFIC ADVANTAGES

- Freedom of movement : very comfortable high-quality cotton lining.
- Multi-purpose chemical resistance (acids, aliphatic solvents) increased by heavyweight rubber coating.
- Longer working life : textile liner, thickness of glove.
- Forearm protection :Stanzoil 337.
- High mechanical resistance.
- Safe handling of slippery objects thanks to the reinforced grip.
- Recommended for persons sensitized to natural rubber proteins (Stanzoil 334).

MAIN FIELDS OF USE

- Work in boiler rooms
- Manufacture of pumps and compressors.
- Oil refineries.
- Mineral production.
- Railway work.
- Transport of chemical products.
- Metal treatments.

INSTRUCTIONS FOR USE

For enhanced safety and service life of the gloves :

- Store the gloves in their original packaging at a temperature not below 5°C.
- It is recommended to check that the gloves are suitable for the intended use, because the conditions of use at workplace may differ from the "CE"-type tests.
- It is not recommended for persons sensitized to natural latex proteins (for Stanzoil 337) and dithiocarbamates to use these gloves.
- Put the gloves on dry, clean hands.
- Do not use the gloves in contact with a chemical for a duration in excess of the measured breakthrough time. Refer to the chemical resistance chart hereafter or contact the Technical Customer Service - MAPA PROFESSIONNEL in order to know this breakthrough time. Use 2 pairs alternatively when in long duration contact with a solvent.
- Turn the cuff end down in order to prevent a hazardous chemical from dripping onto the arm.
- Before taking off the gloves, clean them as appropriate :
 - in use with paints, pigments and inks : wipe with a clean cloth dampened with a suitable solvent, and rub over with a dry cloth
 - in use with a solvent (diluent, etc...) : rub over with a dry cloth
 - in use with acids or alkalies : thoroughly rinse the gloves under running water, and rub over with a dry clothCaution : using the gloves or submitting them to another cleaning or laundering process can alter their performance levels.
- Ensure the inside of the gloves is dry before putting them on again.
- Inspect the gloves for cracks or snags before reusing them.

STANZOIL 334 - 337

CHEMICAL RESISTANCE CHART

These gloves are designed for protection against numerous chemicals such as acids, bases, alcohols, petroleum solvents. Avoid contact with pure aromatic and chlorinated solvents. In order to know whether these gloves are appropriate for a given chemical, refer to the table hereafter or enquire to Mapa Professionnel's Technical Customer Service.

The results quoted in the table hereafter are relative to tests performed on the glove style Stanzoil 334.

CHEMICAL	CAS Nr.	Chemical Resistance Index	Degradation Index (1 to 4)	Permeation (EN 374)	
				Breakthrough time (minutes)	Permeation index (0 to 6)
Acetaldehyde*	75-07-0	-	NT	5	0
Acetic acid 100%*	64-19-7	++	4**	210	4
Acetone	B 67-64-1	-	2	10	0
Acetonitrile	C 75-05-8	+	4**	64	3
Acrylic acid 95%	79-10-7	+	2	77	3
Acrylonitrile*	107-13-1	=	NT	19	1
Allyl chloride*	107-05-1	-	NT	8	0
Ammonium hydroxide*	1336-21-6	++	4**	265	5
Amyl acetate*	628-63-7	=	NT	24	1
Amyl alcohol*	71-41-0	++	4**	>480	6
Aniline*	62-53-3	++	4**	142	4
Benzene*	71-43-2	-	NT	3	0
Benzoyltrichloride*	98-07-7	=	NT	63	3
Benzoyl chloride*	98-88-4	=	NT	28	1
Benzyl chloride*	100-44-7	=	NT	17	1
n- Butanol*	71-36-3	++	4**	>480	6
Butyl Acetate*	123-86-4	-	1**	17	1
Butyl Acrylate*	141-32-2	-	1**	15	1
Butyl-tert-hydroperoxide 70%*	75-91-2	++	NT	453	5
Butyl-tert-methyl ether*	1634-04-0	-	NT	<6	0
2- Bromo-ethyl acetate*	927-68-4	=	NT**	52	2
Calcium hydroxide*	1305-62-0	++	4**	>480	6
Carbon disulfide*	E 75-15-0	-	NT	1	0
Carbon tetrachloride*	56-23-5	=	NT	24	1
Chlorine (gaz) *	7782-50-5	++	NT	> 480	6
Chlorine (liquid) *	7782-50-5	+	NT	44	2
Chloroform*	67-66-3	-	NT	2	0
m/o/p Chlorotoluene*	-	-	NT	14	1
Chromic acid 50%*	7738-94-5	++	4**	347	5
Cumene*	98-82-8	-	1**	21	2
Cyclohexane	110-82-7	++	3	42	2
Diethyl phthalate*	84-74-2	++	3**	>480	6
Dichloroethane*	107-06-2	-	NT	5	0
Dichloromethane (methylene chloride)*	D 75-09-2	-	NT	4	0
Dichloropropene isomers*	542-75-6	-	NT	13	1
Diesel fuel nr 2*	-	++	NT	>480	6
Diethylamine *	G 109-89-7	-	NT	< 4	0
Diethylether*	60-29-7	++	3**	545	6
Diisobutyl ketone*	108-83-8	+	NT	55	2
Diisopropylethylamine*	7087-68-5	++	4**	301	5
n-n Dimethylacetamide*	127-19-5	=	2**	45	2
Dimethylformamide*	68-12-2	=	NT	29	1
Dimethylsulfide*	75-18-3	-	1**	2	0
Dimethylsulfoxide (DMSO)*	67-68-5	++	4**	450	5
Diphenyl phosphate*	4712-55-4	++	NT	>480	6
Epichlorhydrin*	106-89-8	=	NT	22	1
Ethanol*	64-17-5	++	4**	363	5
Ethyl acetate *	I 141-78-6	-	NT	8	0
Ethyl acrylate*	140-88-5	-	1**	18	1
Ethylbenzene*	100-41-4	-	NT	<1	0
Ethylchloroformate*	541-41-3	-	1**	3	0
Ethylene glycol*	107-21-1	++	4**	>480	6
Formaldehyde 37%*	50-00-0	++	4**	>480	6
n-Heptane	J 142-82-5	+	4**	37	2
Hexane *	110-54-3	+	4**	36	2
Hydrazine*	302-01-2	++	4**	>480	6
Hydrochloric acid 37%*	7647-01-0	++	4**	> 480	6

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CHEMICAL RESISTANCE CHART

CHEMICAL	CAS Nr.	Chemical Resistance Index	Degradation Index (1 to 4)	Permeation (EN 374)	
				Breakthrough time (minutes)	Permeation index (0 to 6)
Hydrofluoric acid 48%*	7664-39-3	++	NT	>480	6
Hydrogen Fluoride 99%*	7664-39-3	=	NT	35	2
2- Hydroxyethyl acrylate *	818-61-1	+	NT	>480	6
2- Hydroxy-ethyl metacrylate*	868-77-9	++	NT	>480	6
Hypophosphorous acid 50%*	6303-21-5	++	NT	>480	6
Isobutylalcohol*	78-83-1	++	4**	>480	6
Isopropanol*	71-23-8	++	4**	>450	>5
Maleic acid*	110-16-7	++	4**	>480	6
Methanol	A 67-56-1	++	4**	73	3
Methylamine 40%*	74-89-5	++	4**	390	5
Methyl ethyl ketone*	78-93-3	-	1**	8	0
Methyl isobutyl ketone*	108-10-1	=	2**	19	1
Methyl methacrylate	80-62-6	-	1	15	1
Naphta (mineral spirits)*	64475-85-0	+	NT	127	4
Naphta VM&P*	8032-32-4	+	4**	23	1
Nitric acid (fuming)*	7697-37-2	-	NT	3	0
Nitrobenzene *	98-95-3	=	NT	52	2
Nonylphenol*	25154-52-3	++	NT	>480	6
Oleum*	8014-95-7	-	NT	10	0
Parachlorobenzotrchloride*	5216-25-1	+	NT	70	3
Phenol (saturated)*	108-95-2	++	4**	>480	6
Phosphoric acid 85%*	7664-38-2	++	4**	> 480	6
Potassium hydroxide 50%*	1310-58-3	++	4**	>480	6
Potassium iodide 59%*	7681-11-0	++	4**	>480	6
Propylene oxide*	75-56-9	-	NT	<1	0
Pyridine*	110-86-1	-	1**	9	0
Sodium carbonate 21%*	497-19-8	++	4**	>480	6
Sodium hydroxide 20%	1310-73-2	++	4	> 480	6
Sodium hydroxide 50%	K 1310-73-2	++	4**	> 480	6
Sodium thiosulfate 41%*	7772-98-7	++	4**	>480	6
Stoodard solvent*	8052-41-3	++	NT	241	5
Styrene*	100-42-5	-	NT	2	0
Sulfur dichloride*	10545-99-0	=	NT	30	1
Sulfur monochloride*	10025-67-9	++	NT	>480	6
Sulphuric acid 40%	7664-93-9	++	4	> 480	6
Sulphuric acid 96%	L 7664-93-9	=	NT	117	3
Sulphuric acid 98% *	7664-93-9	=	2**	88	3
Tetrachloroethylene (perchloroethylene)*	127-18-4	-	1**	7	0
Tetrahydrofurane*	H 109-99-9	-	NT	2	0
Toluene	F 108-88-3	-	1**	5	0
Trichloroethylene*	79-01-6	-	NT	1	0
Triethylamine *	121-44-8	=	NT	35	2
Trifluoroacetic acid 99%*	76-05-1	++	4**	>480	6
Unleaded petrol*	8006-61-9	-	2**	7	0
Vinyl acetate*	108-05-4	+	2**	193	4
Xylene*	1330-20-7	-	1**	16	1

NT: not tested yet

* : permeation test according to ASTM F739 standard

** : degradation test based on weight change according to the modified ASTM D471 after a 60 minute contact.

Chemical Resistance Index :

- ++ can be used for **long duration contact** (limited to breakthrough time)
- + can be used for **short repeated contacts**
(for a total duration not exceeding the breakthrough time)
- = can be used against **splashes**
- **not recommended**

Degradation Index : a high index indicates a low degradation of the gloves in contact with the chemical.

Breakthrough Time : permeation test performed on the palm of the glove in MAPA laboratories, unless otherwise specified.

Permeation Index : a high index indicates a long breakthrough time.