

LABORATORY GLOVES

Red

Chemical risk

Orange

Biological risk

Green

General risk



IT IS IN THE NAME!

The name of our company, SHIELD Scientific, reflects the particular focus we have on the laboratory and high technology sectors. Our aim is to bring to these markets personal protective equipment that for the first time is adapted to the needs of these segments.



Compliance

Today it may sound natural to select gloves that are CE marked PPE category III and have an AQL of 0.65. It was not always the case. We were among the first to offer laboratory gloves classified as category III (Complex Design), as defined in the PPE Directive 89/686/ EEC, highlighting the fact that only category III gloves were likely to provide the necessary personal protection. Likewise whether you are seeking extra-length gloves for chemical protection or additional protection from microbiological hazards, SHIELD Scientific gloves continue to exceed the minimum requirements.

Comfort

Comfort is very often at the top of the user's criteria for selection of gloves. Whilst numerous manufacturers are engaged in a rationalisation process - in particular a reduction of thickness/ length of the glove in an effort to cut costs - SHIELD Scientific continues to alert users about the importance of thickness and length in terms of maintaining the protection performance of the glove. We also embrace the latest advances in synthetic glove technology. By offering gloves based on nitrile with a blend of neoprene, users can experience a level of elasticity not normally associated with nitrile gloves.

Protection

When selecting a glove, its protective properties are often lost in the jungle of features offered to users by the manufacturers. The complexity maintained by glove producers surrounding norms, cost effectiveness, logistics and comfort usually drives the choice of the users at the expense of protection. Quite simply, THE THICKER AND LONGER THE GLOVE, THE BETTER YOU WILL BE PROTECTED. One of the newest developments from SHIELD Scientific is twinSHIELD™ technology. This is a unique double layer system to improve significantly the protection and comfort mix and to bring to you a new era of disposable glove technology.

AT YOUR SERVICE!

SHIELD Scientific is a European company. The headquarters are strategically based in the Netherlands. In Malaysia we have storage space for up to 2000 pallets, whilst logistics management is tightly controlled. The manufacturing sites are all certified according to ISO 9001:2015 and ISO 13485:2016. Distribution throughout Europe is provided by a network of Master Distributors. At SHIELD Scientific, everyone is focused on the needs of the customer with a view to developing long-term partnerships where the emphasis is on mutual gain.

www.shieldscientific.com is the nerve centre for the dissemination of information! Numerous information is available to the general public covering technical questions and those relating to the activities of SHIELD Scientific. Our website was built to be an interactive tool and a source of information to help users make the right decision.



Glove Selection Guide

Selecting laboratory or cleanroom gloves can be really agonizing, as there are important choices and understanding the advantages and disadvantages can be difficult to appreciate. Our online glove selection guide is designed to help you to facilitate this choice.



Chemical Resistance Guide

We have developed one of the most comprehensive chemical resistance guides. Data can be selected either by CAS number, chemical name or product type. The testing has been conducted by reputable testing laboratories according to EN 16523-1:2015 (Determination of resistance to permeation by chemicals).



Product Specifications

For each glove, a product data sheet can be consulted online. This document covers all the technical aspects such as product and commercial information, physical properties, applicable norms, performance data, quality systems etc.



Certificates and tests reports

We offer a wide variety of certification on our disposable gloves. In this respect, Declarations of Conformity (DoC) are available on all laboratory gloves. Additionally, we have conducted many tests to help the users in the selection process. As an example, upon request, test data based on ASTM D6978-05 (rather than the less stringent EN 16523-1:2015) is available on a range of chemotherapy gloves.



Education

We are developing tools such as posters and other information to help those responsible for safety, hygiene, quality, production and purchasing in their efforts to reduce risks, improve the process and optimize costs. On a daily basis we conduct joint visits with our distributors and provide training of the distributor sales teams that are responsible for selling our products.



Extranet

Secure access is provided to distributors and customers wishing to obtain directly more specific commercial and technical information.



ONE RISK, ONE GLOVE: Protecting your hands in all situations

«I would like a glove that is both comfortable, protects against all types of hazards and is economic». To date, this is simply technically impossible. At SHIELD Scientific, we believe that consideration should be given to the use of several gloves in order to offer the necessary protection in the laboratory to various hazards, thereby ensuring the safety of users whilst keeping an eye on budgets.



Chemical risk

Being compliant with the standards does not guarantee absolute protection because what is tested relates to the materials used, methods of manufacture, length and thickness of the glove. In the table below you'll see the performance for three of our synthetic gloves based on EN 16523-1:2015. On paper they all comply with the same standards, but as you will notice they do not offer the same level of performance! THE THICKER AND LONGER THE GLOVE, THE BETTER YOU WILL BE PROTECTED!

Chemical name	CAS n°	Concentration	SHIELDskin CHEM™ NEO NITRILE™ 300	SHIELDskin™ ORANGE NITRILE™ 260	ecoSHIELD™ Eco Nitrile PF 250
Thickness (Palm)			0.25 mm	0.14 mm	0.10 mm
Sodium acetate Sat. solution	127-09-3	100%	480 min	480 min	480 min
Acetic Acid	64-19-7	100%	90 min	7 min	4 min
Hydrochloric Acid	7647-01-0	37%	480 min	130 min	98 min
Formic Acid	64-18-6	98-100%	125 min	4 min	3 min
Acrylamide	79-06-1	40%	480 min	480 min	480 min
Secondary isoamyl alcohol	598-75-4	98%	480 min	55 min	30 min
Ethidium Bromide	1239-45-8	5%	480 min	480 min	480 min
Chloroform	67-66-3	99.8%	4 min	0 min	0 min
Dimethyl Formamide (DMF)	68-12-2	99%	9 min	4 min	1 min
Dimethyl Sulfoxide (DMS0)	67-68-5	99%	179 min	48 min	10 min
Ethanol	64-17-5	100%	154 min	20 min	9 min
Formaldehyde	50-00-0	37%	480 min	480 min	480 min
Formamide	75-12-7	99%	123 min	99 min	11 min
Isobutanol	78-83-1	99%	480 min	76 min	39 min
Isopropanol	67-63-0	100%	480 min	46 min	33 min
Methanol	67-56-1	99.9%	54 min	5 min	0 min
Phenol	108-95-2	50%	163 min	23 min	15 min
Sodium Hydroxide	1310-73-2	50%	480 min	480 min	480 min
Tris (hydroxymethyl) aminomethane Sat. solution	77-86-1	100%	480 min	480 min	480 min
Xylene	1330-20-7	98.5%	8 min	4 min	2 min

DISCLAIMER: The data provided was based on gloves tested under laboratory conditions, in accordance with EN 16523-1:2015. The information is for guidance only and may not reflect the user's application. A risk assessment should always be made by purchaser to assess the suitability of gloves for a specific application.



Biological risk

Our gloves provide resistance to micro-organisms and viruses. There are three levels of protection (Levels 1, 2 and 3 corresponding respectively with AQL 4.0, 1.5 and 0.65), according to EN 374-2:2014. The highest level of protection is Level 3/AQL 0.65. It is worth remembering that this is a statistical watertight test, which may not be adequate for demonstrating viral resistance. For the latter, referring to a viral penetration test using a bacteriophage (e.g. ISO 16604:2004 Procedure B or ASTM F1671) may be appropriate.



twinSHIELD™ technology

The presence of pinholes cannot be entirely eliminated and yet their existence facilitates the leakage of hazardous chemicals and microbiological agents to come into contact with the user's skin. By virtue of an innovative double-dipping process, we are able to bring to the scientific community the benefits of twinSHIELD TM double-walled protection.

Glove selection

With the SHIELD Scientific product colour coding, selecting the right gloves becomes now an easy exercise!

RED: Chemical risk

ORANGE: Biological risk

■ GREEN: General risk

BLUE: Medical risk





In response to user demand for a glove offering a higher level of protection in the laboratory but without compromising dexterity and comfort, SHIELD Scientific has developed the SHIELDskin CHEM™ range of gloves. Specifically SHIELDskin CHEM™ NEO NITRILE™ 300 represent a new era in glove technology combining enhanced compliance, comfort and protection. This is achieved by virtue of the multi-polymer design. The newest twinSHIELD™ technology provides double-walled barrier resistance. Apart from being registered according to Council Directive 89/686/EEC as Personal Protective Equipment category III (Complex Design), SHIELDskin CHEM™ gloves qualify as chemical resistant gloves having achieved a minimum breakthrough time of thirty minutes in at least three of the twelve chemicals listed in EN 374-1:2003.

SHEDSKIN CHEMINATORY OF THE WORK OF THE WO

SHIELDskin CHEM™ NEO NITRILE™ 300

Neoprene and nitrile synthetic rubber, twinSHIELD™ technology (double layers/bicoloured: red/white, virus & micro-organism resistant), free of Thiurams, non-sterile.

 Size
 XS/6
 S/7
 M/8
 L/9
 XL/10
 XXL/11

 Code
 66 9251
 66 9252
 66 9253
 66 9254
 66 9255
 66 9256

 40 gloves/dispenser
 10 dispensers/case









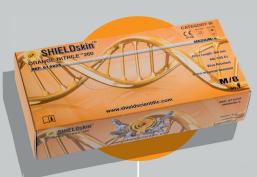




Red Chemical risk www.shieldscientific.com

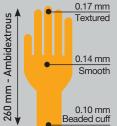
SHIELDSkin

SHIELDskin™ is a range of gloves specifically developed for laboratory use and focuses on meeting the needs of users in terms of comfort, compliance and protection. They are registered according to Council Directive 89/686/EEC as Personal Protective Equipment category III (Complex Design), offering protection to irreversible risk and have been tested according to the latest version of the standards. The synthetic gloves in this range are manufactured using a proprietary multi-polymer formulation, whilst the unique unique bicoloured appearance are based on a double dipping process. This twinSHIELD™ technology means that users enjoy double-walled protection. The colour ORANGE, typically associated with higher risk applications, allows for easy colour differentiation.



SHIELDskin™ ORANGE NITRILE™ 260

Nitrile and neoprene synthetic rubber, powder-free, twinSHIELD™ technology (double layers/bicoloured: orange/white), accelerator-free, virus & micro-organism resistant, non-sterile.



Size	XS/6	S/7	M/8	L/9	XL/10		
Code	67 6231	67 6232	67 6233	67 6234	67 6235		
90 gloves/dispenser 10 dispensers/case							







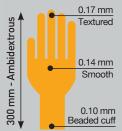






SHIELDskin™ ORANGE NITRILE™ 300

Nitrile and neoprene synthetic rubber, powder-free, twinSHIELD™ technology (double layers/bicoloured: orange/white), accelerator-free, virus & microorganism resistant, non-sterile.



Size	XS/6	S/7	M/8	L/9	XL/10		
Code	67 6251	67 6252	67 6253	67 6254	67 6255		
50 gloves/dispenser 10 dispensers/case							











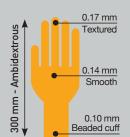




SHIELDskin

SHIELDskin™ ORANGE NITRILE™ 300 Sterile

Nitrile and neoprene synthetic rubber, powder-free, twinSHIELD™ technology (double layers/bicoloured: orange/white), accelerator-free, virus & microorganism resistant, non-sterile.



 Size
 XS/6
 S/7
 M/8
 L/9
 XL/10

 Code
 67 6351
 67 6352
 67 6353
 67 6354
 67 6355

 20 pairs/bag
 8 bags/case





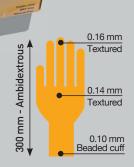








Natural rubber latex, natural colour, powder-free, low protein level, viral & micro-organism resistant, non-sterile.



Size	XS/6	S/7	M/8	L/9	XL/10
Code	67 4251	67 4252	67 4253	67 4254	67 4255
50 glov	es/dispen	ser 10 d	ispensers/d	case	













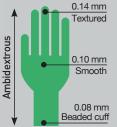
COSHIELD**

The ecoSHIELD™ range is the result of a long study into two unmet needs that today are increasing concerns for the research community and industry generally: ECONOMY and ECOLOGY. SHIELD Scientific was the first in the European market to offer a technical solution to address these two challenges without however compromising quality. ecoSHIELD™ gloves are registered according to Council Directive 89/686/EEC as Personal Protective Equipment. They have been tested according to the latest version of the standards. ecoSHIELD™ is therefore the perfect answer for providing economic and ecological protection in the laboratory.



ecoSHIELD™ Eco Nitrile PF 250

Nitrile synthetic rubber, powder-free, twinSHIELD™ technology (double layers / bicoloured: green/white), free of Thiazoles & Thiurams, virus & micro-organism resistant, non-sterile.



Size	XS/6	S/7	M/8	L/9	XL/10		
Code	62 5121	62 5122	62 5123	62 5124	62 5125		
150 gloves/dispenser 10 dispensers/case							







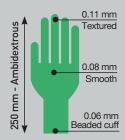






ecoSHIELD™ Natural Nitrile PF 250

Nitrile synthetic rubber, translucent colour, powder-free, free of Thiazoles & Thiurams, non-sterile.



Size	XS/6	S/7	M/8	L/9			
Code	62 7121	62 7122	62 7123	62 7124			
200 gloves/dispenser 10 dispensers/case							









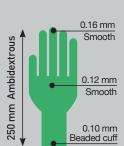






ecoSHIELD™ Eco Latex PF 250

Natural rubber latex, natural colour, powder-free, low protein level, virus & micro-organism resistant, non-sterile.



Size	XS/6	S/7	M/8	L/9
Code	62 3131	62 3132	62 3133	62 3134
100 glo	se			









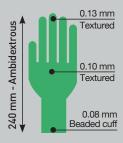






ecoSHIELD™ Natural Latex PF 240

 $Natural\ rubber\ latex,\ natural\ colour,\ powder-free,\ low\ protein\ level,\ non-sterile.$



 Size
 XS/6
 S/7
 M/8
 L/9

 Code
 62 4121
 62 4122
 62 4123
 62 4124

 150 gloves/dispenser
 10 dispensers/case









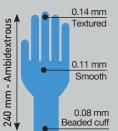
OduoSHIELD[™]

The duoSHIELD™ range of gloves offer an excellent compromise between optimal quality and costs, thereby providing a solution for laboratory personnel seeking protection against limited risks. Likewise these gloves fulfil the growing need for increased patient protection required in the health sector, hence the reference to "duo" or dual protection. The duoSHIELD™ PFH Latex 240 and the duoSHIELD™ PFH Nitrile 240 are especially designed for administering personal patient care on a daily basis. The duoSHIELD™ gloves are registered as Class 1 Medical Devices, according to Council Directive 93/42/EEC and are tested against EN 455-1:2000, EN 455-2:2015, EN 455-3:2015 and EN 455-4:2009.



duoSHIELD™ ICE NITRILE™ 240

Nitrile synthetic rubber, ice-blue colour, powder-free, free of Thiazoles & Thiurams, non-sterile.



Size	XS/6	S/7	M/8	L/9	XL/10		
Code	65 5121	65 5122	65 5123	65 5124	65 5125		
100 glo	100 gloves/dispenser 10 dispensers/case						





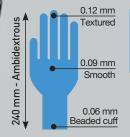






duoSHIELD™ PFH Nitrile 240

Nitrile synthetic rubber, cobalt-blue colour, powder-free, accelerator-free, non-sterile.



100 gloves/dispenser 10 dispensers/case	Size	XS/6	S/7	M/8	L/9	XL/10
	Code	64 5121	64 5122	64 5123	64 5124	64 5125



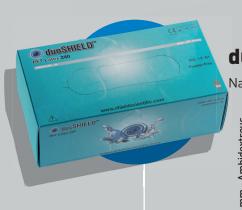






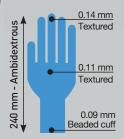






duoSHIELD™ PFT Latex 240

Natural rubber latex, natural colour, powder-free, low protein level, non-sterile.



 Size
 XS/6
 S/7
 M/8
 L/9
 XL/10

 Code
 65 4121
 65 4122
 65 4123
 65 4124
 65 4125

 100 gloves/dispenser
 10 dispensers/case









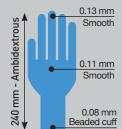






duoSHIELD™ LPS Latex 240

Natural rubber latex, natural colour, lightly powdered, non-sterile.



Size XS/6 S/7
Code 65 1121 65 112

100 gloves/dispenser

65 1122 65

M/8 65 1123 6

L/9 XL/10 65 1124 65 1125

2 65 1123 65 1124 65 10 dispensers/case













Red

Chemical Risk

Orange

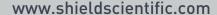
Biological Risk

Green

General Risk

Blue

Medical Risk



Astral Scientific Pty Ltd

PO Box 232 - Gymea NSW 2227 - Phone: (02) 9540 2055 - Fax: (02) 9540 2051 www: astralscientific.com.au - email: sales@astralscientific.com.au

