

# The Science of Protection

**KIMTECH SCIENCE\* Nitrile Gloves**



**KIMTECH\***  
BRAND

# KIMTECH SCIENCE\* Gloves

## Protecting the scientists and the science

CE 0120



**KIMTECH SCIENCE\* Gloves are vital tools in laboratory and research environments, providing all-round protection in a wide range of scientific applications – protecting the user and the scientist.**

- PPE category III, EC directive 89/686/EEC
- Tested in accordance with EN420:2003
- EN374-1:2003 Protection against chemical splash (results on [www.contaminomics.com](http://www.contaminomics.com))
- EN374-2:2003 Protection against penetration from micro-organisms
- ISO16604:2004 Protection against penetration from viruses (Phi-X, Herpes, HIV)



### KIMTECH SCIENCE\* PURPLE NITRILE\* Gloves

Unrivalled protection, cleanliness and quality<sup>1</sup> makes KIMTECH SCIENCE\* PURPLE NITRILE\* Gloves our number one choice for higher risk applications.

- Designed for life sciences, biomedical research, forensic science, R&D and non-sterile drug manufacturing
- AQL 0.65 offers the highest level for EN374-2:2003 protection against penetration by micro-organisms
- Protection against a wide range of chemicals including cytotoxic drugs<sup>2</sup>



### KIMTECH SCIENCE\* STERLING\* Nitrile Gloves

New technology gives high protection of nitrile with superior strength and comfort<sup>1</sup>. KIMTECH SCIENCE\* STERLING\* Nitrile Gloves provide all-round care for science and the environment.

- Protection against a wide range of chemicals including cytotoxic drugs<sup>2</sup>
- 80% stronger and 30% leaner than latex<sup>3</sup> with better protection on most chemicals
- Excellent tactile sensitivity for handling delicate instruments



### KIMTECH SCIENCE\* GREEN NITRILE Gloves

Great value nitrile gloves with added strength, less bulk and the fit and feel of latex. KIMTECH SCIENCE\* GREEN NITRILE Gloves are durable, comfortable and sustainable.

- 40% stronger and 60% leaner than latex<sup>3</sup>
- 250 gloves per standard sized box – reduces waste, space and environmental impact
- Excellent tactile sensitivity for handling delicate instruments

**KIMTECH SCIENCE\* Gloves unique production process significantly reduces particle and residue levels, lowering the risk of contamination – protecting the process and the science.**

- Powder free – lot testing using ISO 21171
- Regular IEST-RP-CC005 testing to measure levels of particles and non-volatile residues
- Non detectable levels of silicone, amide and phthalate (DOP)
- Non-Detectable levels of chemical accelerators: No Thiurams or Thiozoles
- Food contact approved

<sup>1</sup> For KIMTECH SCIENCE\* gloves

<sup>2</sup> per ASTM 6978-05

<sup>3</sup> vs. KIMTECH SCIENCE\* PFE\* Latex gloves

# KIMTECH SCIENCE\* Gloves

## All-round protection for scientific applications

Applications								
Molecular Biology	Biochemistry	Chemistry	Analytical Chemistry	Virology	Genomics	Proteomics	Forensic Science	Non-Sterile Pharmaceutical Production
Main techniques	Primary Risk	Secondary Risk	Primary / Alternative Choice					
Electrophoresis	Chemicals	Contamination						
Polymerized chain reaction	Contamination	Biohazard						
DNA extraction	Chemicals	Biohazard						
Chemical Synthesis & Derivatization	Chemicals	Contamination						
Pathology	Biohazard	Contamination						
Toxicology	Chemicals	Biohazard						
Cell Culture	Sensitive Instruments	Contamination						
Microscopy	Sensitive Instruments	Contamination						
Spectroscopy	Sensitive Instruments	Contamination						
Chromatography	Chemicals	Sensitive Instruments						

EN374-1:2003	EN374-2:2003	AQL	Virus Protection	Material	Protection level against Risks			Product Code	Description	Sizing	Glove Length
					Biohazard <sup>1</sup>	Chemical <sup>2</sup>	Contaminants <sup>3</sup>				
		0.65	ISO 16604:2004 Proc. B	Nitrile				97610-97614	KIMTECH SCIENCE* PURPLE NITRILE-XTRA* Gloves	XS-XL	30cm
		0.65	ISO 16604:2004 Proc. B					90625-90629	KIMTECH SCIENCE* PURPLE NITRILE* Gloves	XS-XL	24-25cm
	1.5	ISO 16604:2004 Proc. B	98341-98345					KIMTECH SCIENCE* STERLING NITRILE-XTRA* Gloves	XS-XL	30cm	
	1.5	ISO 16604:2004 Proc. B	99210-99214					KIMTECH SCIENCE* STERLING* Gloves	XS-XL	24-25cm	
	1.5	ISO 16604:2004 Proc. B	99850-99854					KIMTECH SCIENCE* GREEN Nitrile Gloves	XS-XL	24-25cm	
	1.5	ISO 16604:2004 Proc. B	50501-50504					KIMTECH SCIENCE* PFE-XTRA* Gloves	XS-XL	30cm	
	1.5	ISO 16604:2004 Proc. B	E110-E550					KIMTECH SCIENCE* PFE* Gloves	XS-XL	24-25cm	
	1.5	ISO 16604:2004 Proc. B	SP2110-SP2550					KIMTECH SCIENCE* SATIN PLUS* Gloves	XS-XL	24-25cm	
	1.5	ISO 16604:2004 Proc. B									

<sup>1</sup> Biohazard protection, EN374-2:2003 air and liquid leak test using ISO2859 sampling to determine Acceptable Quality Limit (AQL)

<sup>2</sup> Limited chemical splash protection EN374-3:2003 chemical permeation test results for individual chemicals available on [www.contaminomics.com](http://www.contaminomics.com)

<sup>3</sup> Contaminants: IEST-RP-CC005 test method to measure level of particles, non-volatile residue and extractable ions, conducted periodically by internal product testing laboratory.



Visit [www.contaminomics.com](http://www.contaminomics.com) for

- Technical data sheets, declarations of conformity
- Full list of EN374-3:2003 chemical permeation test results for all gloves
- Regulatory information, importance of certified protective equipment vs. medical device gloves
- GreenMeter measuring reduction in waste, space, cost and environmental impact

### KIMTECH SCIENCE\* Gloves chemical permeation test results - EN374-3:2003

Class	EN374-3:2003 Permeation breakthrough times						
	0	1	2	3	4	5	6
Time	<10	10-30	30-60	60-120	120-240	240-480	>480
Usage	Not recommended	Splash protection	Medium protection	High protection			

Chemicals	CAS number	Type	Scientific applications	REACH Symbol
Acetic acid, concentration 10%	64-19-7	Organic acid	Chemical synthesis	
Acetone, concentration 99.8%	67-64-1	Ketone	Solvent for laboratory cleaning, Jones oxidation, SN2 reactions	
Acetonitrile, concentration 99.9%	75-05-08	Nitrile	Chemical synthesis, liquid chromatography, DNA analysis	
Acrylamide, concentration 40%	79-06-1	Amide	Electrophoresis, DNA analysis	
1-Butanol, concentration 99%	71-36-3	Alcohol	Chemical extraction, liquid chromatography	
Citric acid (monohydrate), concentration 30%	77-92-9	Organic acid	Passivate high-purity process piping in biotech and pharma industry	
Cyclohexane, concentration 99.7%	110-82-7	Solvent	Solvent, analysis, calibration of differential scanning calorimetry	
Dichloromethane, concentration 99%	75-09-2	Chloro-Hydrocarbon	Solvent for organic compounds, plastic welding adhesive	
Diethylether, concentration 99.9%	60-29-7	Ether	Solvent, liquid-liquid extraction	
Dimethyl Sulphoxide, concentration 99%	67-68-5	Solvent	Polymerised chain reaction, organic synthesis, extractant in biochemistry	Not hazardous according to Directive 67/548/EC
Ethanol, concentration 70%	64-17-5	Alcohol	General purpose solvent	
Ethanol, concentration 98%	64-17-5	Alcohol	General purpose solvent	
Ethidium bromide, concentration 1%	1239-45-8	Intercalating agent	Flourescent tag for electrophoresis	
Formaldehyde, concentration 37%	50-00-0	Aldehyde	Chemical synthesis	
Glutaraldehyde, concentration 50%	111-30-8	Aldehyde	Biochemical synthesis, creation of toxoid vaccines	
Hydrochloric acid, concentration 30%	7647-01-0	Inorganic acid	Chemical synthesis, pH regulation, ion exchange	
Hydrochloric acid, concentration 37%	7647-01-0	Inorganic acid	Chemical synthesis, pH regulation, ion exchange	
Hydrofluoric acid, concentration 40%	7664-39-3	Inorganic acid	Remove oxide impurities from steel, silicon wafers. Chemical synthesis	
Hydrogen peroxide, concentration 30%	7722-84-1	Oxidizing agent	Disinfectant, antiseptic, oxidizer	
Isopropanol, concentration 70%	67-63-0	Alcohol	Solvent, Disinfectant, Cleaning electronic devices	
Isopropanol, concentration 99.5%	67-63-0	Alcohol	Solvent, disinfectant, cleaning electronic devices	
Methanol, concentration 99%	67-56-1	Alcohol	Solvent, electrophoresis	
Nitric Acid, concentration 50%	7697-37-2	Inorganic acid	Chemical synthesis, strong oxidizing agent	
Nitric Acid, concentration 70%	7697-37-2	Inorganic acid	Chemical synthesis, strong oxidizing agent	
Sodium hydroxide, concentration 40%	1310-73-2	Base	pH regulation, organic synthesis	
Sodium hydroxide, concentration 50%	1310-73-2	Base	pH regulation, organic synthesis	
Sulphuric acid, concentration 50%	7664-93-9	Inorganic acid	Dehydrating agent, many industrial applications	
Sulphuric acid, concentration 95%	7664-93-9	Inorganic acid	Dehydrating agent, many industrial applications	
Toluene, concentration 99.9%	108-88-3	Aromatic hydrocarbon	Solvent, fullerene indicator, carbon nanotubes, hemoglobin extraction	
Xylene, concentration 99%	1330-20-7	Aromatic hydrocarbon	Solvent, cleaning agent for steel and for silicon wafers and chips, dry ice baths	

Breakthrough time (minutes)		
GREEN NITRILE	STERLING* Nitrile	PURPLE NITRILE*
>480	>480	>480
<2	<2	<2
	<2	<2
>480	>480	>480
8	32	50
	>480	>480
		<2
	<2	
		32
16	33	42
6		20
	>480	>480
>480	>480	>480
	>480	>480
210	413	>480
	88	173
	6	15
	>480	>480
	>480	>480
11	50	54
<2	5	7
11	13	60
<2	<2	9
>480	>480	>480
>480	>480	>480
	>480	>480
<2	10	15
<2	<2	<2
<2	<2	<2

Data given are based on results of tests performed in accordance with EN374-3:2003, by an independent laboratory. These tests may not adequately replicate any specific condition of use. Kimberly-Clark has no detailed knowledge or control over the conditions of end use., therefore data must be for advisory purposes only, and Kimberly-Clark must decline any liability.



Visit [www.contaminomics.com](http://www.contaminomics.com) for full set of test results

**INFORMATION SERVICE**

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For sales enquiries please email [kimtech.support@kcc.com](mailto:kimtech.support@kcc.com)