

High Performance Butyl Rubber Glovebox Gloves For Controlled Atmosphere Enclosures

Item Number: ST01



Introduction

Engineered for demanding controlled atmospheres, these high performance butyl rubber glovebox gloves deliver exceptional impermeability against gases, liquids, and polar hydrocarbons. Certified to rigorous EN standards, they ensure maximum operator dexterity, durability, and reliable environmental isolation for advanced industrial research.

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Application	Description	Key Benefit
Advanced Battery & Energy Storage R&D	Critical assembly and handling of metallic lithium foils, solid-state electrolytes, and reactive precursor chemistries inside argon-purged glovebox environments.	Sub-ppm moisture and oxygen containment prevents chemical degradation of pyrophoric lithium and highly reactive electrolyte formulations.
Synthetic Organic & Organometallic Chemistry	Synthesis and purification involving aggressive polar solvents, organic acids, ketones, esters, and amine-based catalysts under strictly inert atmospheres.	Exceptional chemical resistance stops breakthrough and swelling caused by polar organic solvents, maintaining absolute barrier integrity.
Nuclear Material Containment & Radiochemistry	Safe handling, processing, and transfer of radioactive isotopes, alpha-emitting substances, and nuclear fuel pellets inside shielded isolators.	Reliable physical barrier prevents radioactive particulate contamination while offering mechanical durability and gas tightness.
Sterile Pharmaceutical Compounding & Isolators	Aseptic formulation of cytotoxic oncology drugs, potent active pharmaceutical ingredients (APIs), and sterile injectable biologicals.	Validated chemical isolation and smooth surface finish allow continuous sterilization using 70% isopropanol without polymer degradation.
Semiconductor & Thin-Film Precursor Processing	Synthesis and chemical vapor deposition (CVD) precursor loading involving air-sensitive organometallics, metal halides, and quantum dots.	Near-zero gas permeability eliminates trace atmospheric contamination, ensuring optimal purity and yield in nano-scale fabrication.
Anaerobic Microbiology & Biomedical Research	Culture manipulation of strict anaerobic pathogens, obligate anaerobes, and sensitive microbiological cultures requiring absolute oxygen-free enclosures.	Airtight seal preserves exact atmospheric ratios over prolonged incubation and culture maintenance cycles.
Specialty Chemical & Corrosive Reagent Packaging	Safe repackaging, quality control sampling, and metering of concentrated organic reagents and hazardous polar volatile chemicals.	Heavy-duty physical resilience combined with ambidextrous versatility ensures maximum operator safety against chemical splashes.

Parameter	Specification
Material Composition	Premium-Grade Synthetic Butyl Rubber
Port Size Compatibility	8 Inches (203 mm) / 10 Inches (254 mm)
Available Thicknesses	15 mil (0.38 mm) / 30 mil (0.76 mm)
Total Nominal Length	32 Inches (813 mm)
Hand Specificity	Ambidextrous (Left / Right Interchangeable)
Surface Finish	Smooth Gloss Finish
Color	Industrial Black

Parameter	Specification
Cuff Style	Molded Beaded Cuff
Beaded Cuff Thickness	3.2 mm to 6.4 mm
Hand Size Options	8H / 9Q / 10H
Regulatory & Safety Standards	EN ISO 21420:2020, EN ISO 374-1:2016, EN ISO 374-5:2016, EN 388:2016
Packaging Configuration	1 piece per sealed polyethylene bag; 20 pieces per shipping carton
Maintenance & Decontamination	Surface wipe-down with 70% Isopropanol (IPA)
Recommended Storage Conditions	Original packaging stored between 5 °C and 25 °C (41 °F to 77 °F)
Shelf Life	3 Years (in original, unopened packaging under recommended conditions)
Environmental Disposal	Non-recyclable; classified as non-toxic solid waste if uncontaminated

Product Identifier	Port Size	Thickness	Length	Hand Geometry	Size Specification
ST01-8-15	8 Inches (203 mm)	15 mil (0.38 mm)	32 Inches (813 mm)	Ambidextrous	9Q (Compatible: 8H, 10H)
ST01-8-30	8 Inches (203 mm)	30 mil (0.76 mm)	32 Inches (813 mm)	Ambidextrous	9Q (Compatible: 8H, 10H)
ST01-10-15	10 Inches (254 mm)	15 mil (0.38 mm)	32 Inches (813 mm)	Ambidextrous	9Q (Compatible: 8H, 10H)
ST01-10-30	10 Inches (254 mm)	30 mil (0.76 mm)	32 Inches (813 mm)	Ambidextrous	9Q (Compatible: 8H, 10H)