

# Glove Glossary

## ACCELERATORS

Chemicals added during the glove manufacturing process, used to control the physical properties of the latex film, include carbamates and thiurams.

## ASTM

American Society for Testing and Materials – A volunteer organization which executes standards used to certify products for consumer purchase.

## AQL – ACCEPTABLE QUALITY LEVEL

The AQL is the quality level that is the worst tolerable process average when a continuing series of lots is submitted for acceptance sampling. The lower the AQL number, the less defects allowed per sample size to fail.

## CHLORINATION

A Process using chlorine to achieve a powder-free surface finish for a glove.

## DOUBLE POLYMER COATING

A non chlorinated process, using polymer material for both inside and outside surfaces, to achieve a powder free surface finish for a glove.

## ELONGATION

The number of times a glove can be stretched from its original length until it breaks – expressed in percentage, e.g., 800% elongation demonstrates a test dumbbell stretched eight times its original length before breaking.

## EN

European Norm certification indicates compliances with the European Quality System Regulation (QSR)

- EN 388 Protection against mechanical risk
- EN 374 Protection against dangerous chemicals and micro-organisms
- EN 420 Describing general standards for protective gloves
- EN 455 Medical Gloves for single use
- EN 455 – 1 Specification for freedom of holes (barrier properties)
- EN 455 – 2 Specification for physical properties
- EN 455 – 3 Requirements and testing for biological evaluation (biological properties/labeling)
- EN 455 – 4 Requirements and testing for shelf life determination

## FORMER

A ceramic glove mold used on the manufacturing line.

## FDA 510K

Pre-market medical device approval issued by the United States Food & Drug Administration. Required for a medical glove to be imported and marketed in the United States.

## HOLE

A hole found in a glove that is visible to the naked eye.

## INSPECTION LEVEL

The criteria that identifies the number of sample pieces to be inspected in a given lot.

## ISO

International Standards Organization – ISO is an international organization composed of national standards bodies from over 75 countries.

## ISO 9001:2000

Quality Management System which specifies the audit requirements that will produce consistency in product quality; intended to meet or exceeds customer specifications; ultimately improving customer satisfaction.

## Glove Glossary

### LATEX

An emulsion of rubber or plastic globules in water used in paints, adhesives, and various synthetic rubber products including gloves.

### MODULUS

The force required to stretch the glove to a specific length of its original length, e.g., the MPa measured at 300% and 500% of a glove's elongation.

### MONOMER

A single molecule that has the ability to combine with identical or similar molecules, a process also known as polymerization.

### MPa – MEGA PASCALS

Unit of measure used to report tensile testing.

### NITRILE

A synthetic material extracted from petroleum used in glove manufacturing.

### NEOPRENE

Chloroprene rubber, also extracted from petroleum, raw material used in glove manufacturing.

### PINHOLE

A minute hole found in a glove but not visible to the naked eye. Watertight tests are conducted to detect this size of hole.

### POLYMER

A chain of many monomers.

### POLYMERIZATION

A chemical reaction in which two or more molecules, or monomers, combine to form larger molecules, or polymers.

### PREPOWDERED GLOVE

A glove that has powder coated on the surface, usually corn starch.

### PROTEIN

A residual organic protein found in the latex base material.

### PVC – POLY VINYL CHLORIDE

A chlorine based inexpensive plastic raw material used in glove manufacturing.

### PSI – POUNDS PER SQUARE INCH

Unit of measure used to report tensile testing.

### SPC – STATISTICAL PROCESS CONTROL

The application of statistical techniques to control a process.

### SMOOTH SURFACE

The glove's surface is smooth, can be full glove or only at palm and cuff.

### SYNTHETIC

A substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources.

### TENSILE

A measure of force at break per square area of material – expressed in mega-pascals (MPa) or pounds per square inch (PSI).

### TEXTURED SURFACE

The glove's surface has a bisque finish, can increase dexterity, can be full surface or just applied to fingers or fingertips.

## Glove Glossary

### THERMOPLASTIC ELASTOMERS

plastics capable of being repeatedly softened by increases in temperature and hardened by decreases in temperature, Generally a rubber-like substance which is easily deformed by a force but returns to its original shape.

### UL – UNDERWRITERS LABORATORIES

An international test organization that conducts testing and certifies entities to various standards.

### VISUAL DEFECTS

Surface defects visible to the naked eye, e.g., non removable dirt, stain, holes, defective beading, pleating.

### VULCANIZE

The process of treating rubber or rubber like materials with sulphur at high heat to improve elasticity and strength or to harden the material.

### WATERTIGHT TEST

The test utilized to pass or fail the barrier integrity of a glove. A glove is filled with one liter of water, suspended and manipulated for two minutes to determine if the barrier is compromised by a pinhole defect.