

## Glove Characteristics

Material	PE	Vinyl	Nitrile	Latex
Composition / source	Polyethylene	Polyvinylchloride	Acrylonitrile and butadiene	Cis 1,4 Polyisoprene
Strength / durability	Very poor, breaks easily in use	Poor, breaks and punctures easily in use	Good, possesses some puncture resistance	Good, strong and durable
Puncture resistance	Punctures easily when stressed	Low tensile strength, puncture easily during use	Has puncture resistant properties	Has puncture resistant properties
Tear resistance	Very poor	Poor	Poor	Good
Chemical barrier properties	Extremely poor protection, soluble in some solvents including alcohol	Limited protection, easily permeated by organic solvents, oils and alcohol	Resists most solvents better than latex, but sensitive to alcohols and ketones	Good protection from most caustics and detergents, soluble to solvents including alcohol
Strength deterioration in O <sub>2</sub> , O <sub>3</sub> and UV light	Yes	No	Yes	Yes
Elasticity	Dexterity very compromised	Dexterity compromised	Less than latex, over time tends to cramp wearer's hand if tight	Very good
Softness	Fair	Fair	Good	Very good
Fit and comfort	Very limited	Loose cuff, fit limited	Tighter fit	Very comfortable
Allergenicity	Contains no latex proteins, but contact dermatitis reported from additives	Contains no latex proteins, but dermatitis and other complaints reported from additives	Contains no latex proteins, but dermatitis reported from accelerators and other additives	Contains latex proteins, low powder is always recommended
Use	Short task, single use	Single use	Single use	Single use
Wear life	< 5 mins.	15-30 mins.	< 1 hour	1-2 hours
Cost per use	Very low	Low	Moderate	Low
Advantages	Low cost, lightweight and mild chemical resistance	Low cost, no protein allergens, resists acids, alkalis, fats and resists ageing	Moderate cost, good physical properties and dexterity	Good elasticity and dexterity, low cost, good physical properties and memory
Disadvantages	Only for short-duration tasks, limited fit, feel and strength, dangerous around high heat	Moderate flexibility, limited fit and feel, punctures and fatigues easily, contains irritating chemicals, plasticisers can leach	Limited fit, feel and flexibility, poor memory, possible finger fatigue, contains sensitising chemicals	Not good for use with oils, greases, organics, large quality variations, contains allergens and sensitisers