- > usually made of light-weight plastic
- widely used in labs, custodial work, and health care environments
- help guard against mild irritants, biological materials, and cleaning solutions.
- should be used with care by those who have or are prone to latex sensitivity.



### Shock-Absorbing Gloves

protect against repetitive pushing and pounding or extended contact and help lessen the effects of constant vibration.

#### Chemical-Resistant Gloves

made of rubber, neoprene, polyvinyl, alcohol, or nitrile

protect hands when working with chemicals such as corrosives, oils, and solvents



- always consult the chemical MSDS for instructions regarding glove selection when working with chemicals, paying particular attention to chemicals with local skin effects or skin absorption toxicity.
- > for mixtures and formulated products, select gloves based on the chemical component that will breakthrough the glove material in the shortest time.

#### Glove Care and Use

- > Select the size that is most comfortable for you.
- > Discard disposable gloves in appropriate waste containers.
- > Inspect gloves for signs of deterioration, cuts, tears, and holes prior to each use.
- > Replace worn or damaged gloves.
- > Do not wear watches, rings, or other jewelry that could puncture gloves.
- Wash and dry your hands before and after glove use to reduce contamination

#### **Getting Assistance**

Contact EH&S if you have any questions about glove selection or care.



# Environmental Health & Safety

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Environmental Health & Safety

# Hand Protection



# Hand in Glove with Safety

#### Personal Protective Equipment

Personal protective equipment, or PPE, is designed to protect employees from serious workplace injuries or illnesses resulting from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards.

#### Hazard Assessments

Regulations require employers conduct hazard assessments of the workplace to determine what hazards are present that require the use of PPE, provide workers with appropriate PPE, and train employees to use and maintain it in clean and reliable condition

#### **Hand Injuries**

Two of the most intricately designed instruments that we work with are our hands. There are probably no other "tools" that could take the beatings our hands take and still carry out precision maneuvers. But most of us take our hands for



granted, which can be a painful mistake when you consider that hand injuries account for roughly a third of all disabling on-the-job injuries each year.

Hand injuries are often complex and require lengthy recovery times. Injuries range from simple lacerations to complex replants of whole fingers, if not whole hands. It is often underestimated how much a simple injury can affect the hand.

#### Selecting Gloves

Hand protection is necessary when workers may be exposed to harmful substances through skin absorption, cuts or lacerations, abrasions, chemical burns, thermal burns, and cold temperature.

- Always use the right glove for the job; incorrect ones may not provide protection
- > No one glove will withstand all hazards
- Determine glove use requirements and select ones with the properties and features that best suit your needs
- > Consider:
  - ✓ specific task(s) being performed, including duration and frequency,
  - ✓ the degree of dexterity required,
  - ✓ environmental conditions present,
  - ✓ degree of exposure of the hazard
  - ✓ duration of hand protection use while performing the task,
  - ✓ physical stresses that will be applied
  - ✓ the actual hazards, and
  - ✓ potential hazards

## Cotton/Fabric Gloves

- general work gloves for parts handling and general maintenance
- > improve grip when handling slippery objects

- provide some abrasion resistance
- insulate hands from mild heat or cold



#### Leather/Cut Resistant Gloves

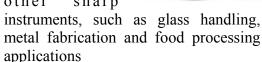
- best for handling sharp objects that might cause lacerations, such as blades,
  - knives, glass, or sheet metal
- guard against injuries from heat, sparks, or rough surfaces



> used in combination with an insulated liner when working with electricity

#### Metal Mesh Gloves

- protect hands from accidental cuts and scratches
- wused by persons
  working with
  cutting tools or
  other sharp



#### Rubber Gloves

insulated and voltage rated for work with electricity