

Guidebook for the Use of Personal Protective Equipment

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1. Introduction

a. What is Personal Protective Equipment?

Personal Protective Equipment (PPE) refers to specialized clothing or equipment worn by employees for protection against health and safety hazards. Personal Protective Equipment is usually designed to protect a certain part of the body such as eyes, ears, hands or feet. Examples of PPE are gloves, construction hard hats, steel toe work boots, and rubber aprons.

When employees might be exposed to hazards in their work activity, an effort is always made, in the first instance, to introduce engineering or administrative controls to reduce the hazard. When it is not feasible or effective to sufficiently reduce the exposures by use of such controls, employees will be required to wear Personal Protective Equipment.

b. What Regulations Require the Use of Personal Protective Equipment?

The regulations concerning PPE are found in Title 8 of the California Code of Regulations. The most pertinent information appears in Article 10, Group 2, entitled "Personal Safety Devices and Safeguards." Sections 3381 through 3385 discuss equipment for protecting hearing, eyes, body, hands and feet.

c. What is the University Policy?

It is the policy of California State Polytechnic University, Pomona, to maintain, insofar as it is reasonably within the control of the University to do so, a campus environment for students, faculty, staff and visitors that will not adversely affect their health and safety nor subject them to avoidable risks of accidental injury. No individual or employee shall be required to perform any task, which is determined to be unsafe or unreasonably hazardous. Furthermore, the University shall ensure that all operational activities are carried out in compliance with existing environmental laws, rules, regulations, and campus policies, in order to protect the environment.

2. How is this Guidebook arranged?

This Guidebook establishes a baseline determination of what minimum Personal Protective Equipment is appropriate for an employee of California State Polytechnic University, Pomona, who is engaged in a particular type of work. A comprehensive list of recommended PPE, specific to the hazards the employee is likely to come in contact with may be generated through the online [RSS Assessment](#) application. Supervisors may complete the online hazard assessment using the following instructions:

1. Access the **RSS Assessment** application at <https://csu.risksafety.solutions> (login credentials are the same as your CPP login). You will be prompted to create a new assessment at which time it will first ask you to set up your group and location(s).
2. Once the group has been set up and associated with a location, you will be prompted to complete and submit the hazard questionnaire. Upon submittal, the system will generate a list of hazards and recommended PPE for members in the lab and those working adjacently.
3. Group members will receive an email asking them to review and acknowledge the assessment, which includes the PPE recommendations. Once all lab members have acknowledged the assessment, the process is considered complete.

Employees should contact their supervisors if there are questions concerning the information in the Guidebook or if a hazard assessment needs to be completed online for their location(s).

Please note that several University departments have developed their own guidelines explaining what equipment is required in particular work situations. Whenever such departmental guidelines exist, they will take precedence over the listing in this Guidebook.

Selecting appropriate PPE requires an understanding of the University's Table of Job Safety Classifications. At California State Polytechnic University, Pomona, each employee is assigned to one of 21 Job Safety Classifications. The required PPE for an employee is determined by the Job Safety Classification of that employee. Because the Job Safety Classification System is of central importance, the next section of this Guidebook (Section 3) provides a review of that classification system.

Subsequently, Section 4 presents the actual controlling table that lists Personal Protective Equipment. That table describes the required PPE for each of the 21 job safety classifications, with the classifications arranged in alphabetical order.

Finally, Chapter 5 provides additional information regarding Personal Protective Equipment.

3. How Are Job Safety Classifications Used to Establish the Personal Protective Equipment Requirements

Employees at California State Polytechnic University, Pomona, are assigned to one of 21 job safety classifications. Each of these safety categories represents a certain set of safety concerns. Employees whose work involves similar hazards are assigned to the same Job Safety Classification.

Using this classification system, it is possible to provide safety information to employees and supervisors in an organized fashion. For example, the Job Safety Classifications are used when listing the type of safety training an employee should receive.¹ Similarly, the classification system is utilized to inform employees of the applicable mandatory safe work practices.²

With regard to Personal Protective Equipment, there is again a utilization of the Job Safety Classification System. A separate listing of PPE requirements is provided for each classification. Within the master list of Requirements for Use of Personal Protective Equipment, an employee simply locates the section for his/her Job Safety Classification, and that is where the required PPE will be listed.

The benefit of this reliance on the Job Safety Classification is that attention is focused not on an employee's job title or department affiliation, but rather on safety hazards of the job for which the employee is hired.

Remember that the Job Safety Classification system is based first and foremost on safety and health issues pertaining to the type work performed by Cal Poly employees. Thus, employees in different departments may be in the same job category if they perform the same general type of work. Similarly, employees in a single department among whom there is frequent interaction, may not be in the same safety classification if their assigned duties take them into significantly different work environments.

A librarian and a counselor work in different departments and perform entirely different work. Yet from a safety viewpoint, the tasks are sufficiently similar that the basic precautions each employee should follow are similar.

By contrast a livestock technician and an instructional support technician, both in the Animal and Veterinary Science Department, may be communicating and interacting regularly with regard to a variety of

¹ see "Safety Training Matrix, "Appendix A, in Environmental Health and Safety Regulatory Training Requirements, Environmental Health and Safety Department, California State Polytechnic University, Pomona, 2009. Also available at <http://www.cpp.edu/~ehs/files/occupational/doc/Regtraining.doc>

² see Mandatory Safe Work Practices, Environmental Health and Safety Department, California State Polytechnic University, Pomona, 2010. Also available at <http://www.cpp.edu/~ehs/files/occupational/doc/safeworkpractices.doc>

departmental issues. Nevertheless, they are in different job safety categories because of differences in hazards to which each is potentially exposed.

Table 1 (below) may be used as a quick reminder of the twenty-one Job Safety Classifications at Cal Poly University. The jobs are listed in alphabetical order and consecutive code numbers are assigned to each job classification.

Table 1: Job Safety Classifications

Job Safety	Code		Job Safety	Code
Construction Worker	10		Livestock Worker	120
Copier/Press Operator	20		Maintenance Worker	130
Custodial Worker	30		Mechanic	140
Driver	40		Media Operator	150
Electronics Worker	50		Medical Worker	160
Engineering Worker	60		Office Worker	170
Equipment Operator/Material Handler				
Equipment Worker	80		Public Safety Worker	190
Field/Grounds Worker	90		Radiation Worker	200
Food Handler	100		Safety Worker	210
Laboratory Worker	110			

Any employee who has questions regarding which job safety classification he or she belongs to should refer to Appendix 1, "Working Titles and Job Safety Classifications." Using this table an employee may search for his or her working title and then view the corresponding Job Safety Classification. In certain cases, a single working title may relate to more than one job safety classification. Here clarification may be obtained by reference to the column that lists department names

4. What Personal Protective Equipment Is Required for My Job Safety Classification?

Table 2, beginning on page 8, is the master listing of Requirements for the Use of Personal Protective Equipment. In this table, the PPE requirements pertaining to each of the twenty-one job safety classifications are listed.

The Job Safety Classifications appear in alphabetical order, starting with Construction Worker. For each classification, various types of protective equipment are listed in the left column, and to the right you will find a discussion of the work situations for which that equipment will be needed.

In most cases, an employee will not wear every item of personal protective equipment during his/her entire work shift. In fact, certain equipment may only be needed when performing a particular specialized task. Review carefully the explanations in the right column of the table.

Finally, remember that a department may have developed its own requirements for personal protective equipment. In such cases, the departmental guidelines take precedence.

5. What Additional Information Is Available?

In certain situations an employee will need to make a careful choice between several variations of personal protective equipment based on the exact details of the hazardous work being undertaken. With eye protection and respiratory protection, for example special design features are incorporated in certain equipment models to provide necessary protection in certain special situations.

Eye protection is generally utilized when there is a risk of receiving eye injuries such as punctures, abrasions or burns. However, in certain situations specialty goggles may be required. A variety of eye protection is available and the choice should be made based on the specific tasks an employee will be performing. For a detailed listing of alternative types of eye protection please refer to Appendix 2.

As with eye protection, there are a number of types of respiratory protection available.³ The choice will be made based on expected air contamination.

³ "Respiratory Protective Equipment Selection Guide," Appendix 4, in Respiratory Protection Plan. Environmental Health and Safety Department, California State Polytechnic University Pomona, 2004. Also available at <http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc> .

Table 2: Requirements for Use of Personal Protective Equipment

Construction Worker (10)	
Personal Protective Equipment Type	Conditions Requiring the Use of PPE
protective clothing	when exposed to chemicals, grease or paint, or when required by manufacturer's specification or by MSDS
leather apron	when welding, brazing, cutting or gouging metal
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when exposed to flying particles, chips, sand, etc. during activities such as chopping, sawing
welding helmets or welding face shields	when welding, brazing, cutting or gouging metal
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc) , administered by EH&S
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistance gloves	when using chemicals or working in unsanitary conditions (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands
traffic safety vests	when working near vehicular traffic areas, performing traffic control, or working in inclement weather or darkness
construction hard hat	when exposed to falling hazards that can result in head injuries
raincoats	when working outdoor in raining weather

Copier/Press Operator (20)	
Personal Protective Equipment Type	Conditions Requiring the Use of PPE
protective clothing: shop coat or apron	when exposed to chemicals, ink or paint, or required by manufacturer's specification or MSDS
shoes with closed toes & heel and with flat sole, or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles	when operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistance gloves	when using chemicals or inks (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands

Custodial Worker (30)	
Personal Protective Equipment Type	Conditions Requiring the Use of PPE
short sleeve shirts and long pants	use for all activities for minimum protection against minor lacerations, burns and other injuries
protective clothing	when exposed to chemicals, grease or paint or required by manufacturer's specification or MSDS
closed toes & heel with flat sole shoes or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions
chemical resistant and/or rubber boots	when using chemicals or working in abnormally wet conditions
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when working overhead, operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistance gloves	when using chemicals or working in unsanitary conditions (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands
safety vests	when working in vehicular traffic areas, performing traffic control, or working outside in an inclement weather or darkness
construction hard hat	when exposed to falling hazards that can result in head injuries
raincoats	when working outdoor in raining weather

Driver (40)	
Type of Personal Protective Equipment	Conditions Requiring the Use of PPE
short sleeve shirts and long pants	use for all activities for minimum protection against minor lacerations, burns and other injuries
protective clothing	when exposed to chemicals or oil, or required by manufacturer's specification or MSDS
closed toes & heel with flat sole shoes or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
seat belt	while driving
traffic safety vest	when stopped for an emergency
cotton or leather gloves	when outside vehicle to place wheel chocks or emergency flares

Electronics Worker (50)	
Type of Personal Protective Equipment	Conditions Requiring the Use of PPE
protective apron or shop coat	when exposed to chemicals, electric sparks, or required by manufacturer's specification or MSDS
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when there is any danger of flying particles, sparks or corrosive materials that may result in eye injuries
dust mask or respiratory protection	when working in high dust & debris environment, or required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistance gloves	when using chemicals (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands

Engineering Worker (60)	
Type of Personal Protective Equipment	Conditions Requiring the Use of PPE
protective apron or lab coat	when exposed to chemicals, or paint or required by manufacturer's specification or by MSDS
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	when working in high dust & debris environment, or required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. Use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistance gloves	when using chemicals (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands
hardhat	in situations where items may fall from overhead
welding helmet or welding face shield	when welding
leather apron	when welding

Equipment Operator/Material Handler (70)	
Type of Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing	when exposed to chemicals, grease or paint or required by manufacturer's specification or MSDS
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions
chemical resistant and/or rubber boots	when using chemicals or working in abnormally wet conditions
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when working overhead, or operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	when working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistant gloves	when using chemicals or working in unsanitary conditions (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands
safety vests	when working in vehicular traffic areas, performing traffic control, or working outside in an inclement weather or darkness
construction hard hat	when exposed to falling hazards that can result in head injuries

Equipment Worker (80)	
Type of Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing	when exposed to chemicals, or paint or required by manufacturer's specification or MSDS
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	when working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistance gloves	when using chemicals (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands

Field/Grounds Worker (90)	
Type of Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing or tyvek suit	when exposed to chemicals, herbicides or fungicides or required by manufacturer's specification or MSDS
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against incidental lacerations and other injuries to feet
chemical resistant and/or rubber boots	when using chemicals or working in abnormally wet conditions
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	When exposed to flying particles, chips, sand, etc. during activities such as chopping, sawing, mowing
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program(Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistant gloves	when using chemicals, herbicides or working in unsanitary conditions (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands
safety vests	when working in vehicular traffic areas, performing traffic control, or working outside in an inclement weather or darkness
sun hat	when working outdoor in hot weather
construction hard hat	when exposed to falling hazards that can result in head injuries
raincoats	when working outdoor in raining weather
chaps	when using chainsaw

Food Handler (100)	
Type of Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing	when exposed to chemicals or required by manufacturer's specification or MSDS
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	when working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistant gloves	when working in unsanitary conditions or using chemicals (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
protective gloves	when work may involve cuts from knives or machinery

Laboratory Worker (110)	
Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing: lab coats, rubber or neoprene apron	when exposed to chemicals, or required by manufacturer's specification, MSDS or SOP of laboratory
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when required by SOP of the laboratory or when handling chemicals or operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistant gloves	when using chemicals or when required by SOP of the laboratory (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands

Livestock Worker (120)	
Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing	when exposed to unpredictable behavior of animals or when exposed to chemicals or paint or required by manufacturer's specification or MSDS
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	When handling chemicals
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistance gloves	when using chemicals (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, holding ropes, working with animals that may bite, or operating tools and power equipment that can result in lacerations and injuries to hands

Maintenance Worker (130)	
Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing	when exposed to chemicals, oil or paint or required by manufacturer's specification or MSDS
fire resistant clothing	for an electrician working in a situation designated as Hazard Category 2 or lower (see Campus Electrical Safety Program)
flash suit jacket and pants	for an electrician working in a situation designated as Hazard Category 3 or higher (see Campus Electrical Safety Program)
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when handling chemicals, operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistant gloves	when using chemicals or working in unsanitary conditions (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands
hard hat	when working in an area where material or equipment may fall and strike a person's head, or when working with electricity in a situation designated as Hazard Category 1 or higher (see Campus Electrical Safety Program)
flashsuit hood	for an electrician working in a situation designated as Hazard Category 3 or higher (see Campus Electrical Safety Program)
sun hat	when working outdoors in hot weather
traffic safety vest	when working on or near roadways

Mechanic (140)	
Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing	when exposed to chemicals, oil or paint or required by manufacturer's specification or MSDS
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	When handling chemicals, operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistance gloves	when using chemicals or vehicle fluids (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands
bump hat	when movement under a vehicle may result in head injury

Media Operator (150)	
Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing	when exposed to chemicals or paint or required by manufacturer's specification or MSDS
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when handling chemicals, operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistant gloves	when using chemicals (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands

Medical Worker (160)	
Type of Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing: lab coat, apron	when exposed to chemicals or body fluids; when required by manufacturer's specification or MSDS
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles.	When handling chemicals, operating tools and power equipment that can result in eye injuries; when an infectious disease may be spread by droplet transmission
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistant gloves	when using chemicals or when there is a possibility of contact with blood or body fluid; when an infectious disease may be spread by contact (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)

Office Worker (170)	
Personal Protective Equipment	Conditions Requiring the Use of PPE
as specified by supervisor	certain activities based on consultation with supervisor

Photography Worker (180)	
Personal Protective Equipment	Conditions Requiring the Use of PPE
protective clothing: shop coat or apron	when exposed to chemicals, ink or paint or required by manufacturer's specification or MSDS
shoes with closed toes & heel, flat sole; or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	When handling chemicals or operating power equipment that can result in eye injuries
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
chemical resistant gloves	when using chemicals or inks (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)

Public Safety Worker (190)	
Personal Protective Equipment	Conditions Requiring the Use of PPE
short sleeve shirts and long pants	use for all activities for minimum protection against minor lacerations, burns and other injuries
closed toes & heel with flat sole shoes or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when handling chemicals, operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistant gloves	when in contact with chemicals or when there is a possibility of contact with blood or body fluid (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials or operating tools that can result in lacerations and injuries to hands
traffic safety vest	when standing on or near roadways
sun hat	when working outdoors on hot days

Radiation Worker (200)	
Personal Protective Equipment	Conditions Requiring the Use of PPE
short sleeve shirts and long pants	use for all activities for minimum protection against minor lacerations, burns and other injuries
protective clothing: lab coat or apron	when exposed to chemicals, isotopes, x-rays or required by manufacturer's specification or MSDS
closed toes & heel with flat sole shoes or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	When handling chemicals, operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistant gloves	when using chemicals or radioactive material (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands

Safety Worker (210)	
Personal Protective Equipment	Conditions Requiring the Use of PPE
short sleeve shirts and long pants	use for all activities for minimum protection against minor lacerations, burns and other injuries
protective clothing: lab coat, apron or tyvek suit	when exposed to chemicals, ink or paint or required by manufacturer's specification or MSDS
closed toes & heel with flat sole shoes or boots	use for all activities for minimum protection against minor lacerations, burns, and other injuries to feet
safety shoes (steel toe, slip and puncture resistant)	potential exposure to foot injuries from falling hazards, crushing and penetrating actions, hot or corrosive substances
chemical splash goggles	when handling chemicals
either: (1) safety glasses with side shields or (2) goggles. Add face shield when working under severe conditions.	when handling chemicals, operating tools and power equipment that can result in eye injuries
dust mask or respiratory protection	When working in high dust & debris environment, or when required by the manufacturer's specification or MSDS. Use of dust mask is a minimum protection. The use of respiratory protection requires compliance with the Campus Respiratory Protection Program (Copy available on the EH&S Web Site at http://www.cpp.edu/~ehs/files/occupational/doc/RespiratoryProtection.doc), administered by EH&S.
ear plugs or ear muffs	when working in noisy environment or operating noisy equipment that can result in hearing damage or loss
chemical resistant gloves	when handling chemicals, oil, inks or paint (see Appendix III - Chemical Glove Selection Table for information on selecting the appropriate type of gloves)
cotton or leather gloves	when handling abrasive materials, operating tools and power equipment that can result in lacerations and injuries to hands
traffic safety vest	when working on or near a roadway
sun hat	when working outdoors in hot weather

Appendix I - Working Titles and Job Safety Classifications

Working Title	Department	Job Safety Classification	Job Safety Number
Administrators	All Departments	Office Worker	170
Ath Equip Tech	Kinesiology & Health Prom	Equipment Worker	80
Auto Mechanic	Facilities Management	Mechanic	140
Auto Mechanic	Hort/ Plant & Soil Sci	Mechanic	140
Building Maintenance Wkr	Facilities Management	Maintenance Worker	130
Building Maintenance Wkr	Housing Services	Maintenance Worker	130
Building Service Engineer	Facilities Management	Maintenance Worker	130
Camera Operator/Editor	I&IT Learning	Media Operator	150
Carpenter	Facilities Management	Construction Worker	10
Clerical/Secretarial	All Departments	Office Worker	170
Coach	Athletics	Equipment Worker	80
Counselor	Counsel & Psy Services	Office Worker	170
Crop Tech	Hort/Plant & Soil Sci	Field/Grounds Worker	90
Custodian	Facilities Management	Custodial Worker	30
Custodian	Housing Services	Custodial Worker	30
Data Control Tech	I&IT	Electronics Worker	50
Director	Env Health & Safety	Safety Worker	210
Dispatcher	Public Safety	Office Worker	170
Duplicating Machine Op	Graphic Comm Services	Copier/Press Operator	20
Electrician	Facilities Management	Maintenance Worker	130
Engineer/Operator	I&IT	Electronics Worker	50
Environmental Specialist	Env Health & Safety	Safety Worker	210
Equipment Tech	Aerospace Engineering	Engineering Worker	60
Equipment Tech	Ag Eng/Irr Science	Engineering Worker	60
Equipment Tech	Chem & Mat Engineering	Engineering Worker	60
Equipment Tech	Civil Engineering	Engineering Worker	60
Equipment Tech	Computer Science	Electronics Worker	50
Equipment Tech	Elect & Computer Eng	Electronics Worker	50
Equipment Tech	Geological Science	Laboratory Worker	110
Equipment Tech	I&IT	Electronics Worker	50
Equipment Tech	Ind & Mfg Engineering	Engineering Worker	60
Equipment Tech	Mechanical Engineering	Engineering Worker	60
Equipment Tech	Music	Equipment Worker	80
Equipment Tech	Physics	Laboratory Worker	110
Faculty	Aerospace Engineering	Engineering Worker	60
Faculty	Ag Eng/Irr Science	Engineering Worker	60
Faculty	Animal & Vet Science	Laboratory Worker	110
Faculty	Animal & Vet Science	Livestock Worker	120

Working Titles and Job Safety Classifications (continued)

Working Title	Department	Job Safety Classification	Job Safety Number
Faculty	Arabian Horse Center	Livestock Worker	120
Faculty	Biological Science	Laboratory Worker	110
Faculty	Chem & Mat Engineering	Engineering Worker	60
Faculty	Chemistry	Laboratory Worker	110
Faculty	Civil Engineering	Engineering Worker	60
Faculty	Computer Science	Electronics Worker	50
Faculty	Elect & Computer Eng	Electronics Worker	50
Faculty	Environmental Design	Construction Worker	10
Faculty	Equine Res/Vet Clinic	Laboratory Worker	110
Faculty	Geological Science	Laboratory Worker	110
Faculty	Hort/ Plant & Soil Sci	Laboratory Worker	110
Faculty	Hort/Plant & Soil Sci	Field/Grounds Worker	90
Faculty	Hotel & Restr Mgmt	Food Handlers	100
Faculty	Human Nutr & Food Sci	Food Handlers	100
Faculty	Ind & Mfg Engineering	Engineering Worker	60
Faculty	Kinesiology & Health Prom	Equipment Worker	80
Faculty	Mechanical Engineering	Engineering Worker	60
Faculty	Physics	Laboratory Worker	110
Faculty☀	Colleges	Office Worker	170
Gardener	Facilities Management	Field/Grounds Worker	90
Graphic Artist	I&IT	Photography Worker	180
Groundswoker	Facilities Management	Field/Grounds Worker	90
HazMat Specialist	Env Health & Safety	Safety Worker	210
Heavy Equipment Operator	Facilities Management	Equipment Operator/Material Handler	70
Industrial Hygienist	Env Health & Safety	Safety Worker	210
Inst Support Asst	I&IT Learning	Media Operator	150
Inst Support Asst	I&IT Learning	Media Operator	150
Inst Support Tech	Animal & Vet Science	Laboratory Worker	110
Inst Support Tech	Biological Science	Laboratory Worker	110
Inst Support Tech	Chemistry	Laboratory Worker	110
Inst Support Tech	College of Engineering	Engineering Worker	60
Inst Support Tech	Environmental Design	Construction Worker	10
Inst Support Tech	Equine Res/Vet Clinic	Laboratory Worker	110
Inst Support Tech	Hort/ Plant & Soil Sci	Laboratory Worker	110
Inst Support Tech	Physics	Laboratory Worker	110
Interpreters	Disability Resource Center	Office Worker	170
Laboratory Tech	Student Health Center	Laboratory Worker	110

Working Titles and Job Safety Classifications (continued)

Working Title	Department	Job Safety Classification	Job Safety Number
Librarian	Library Services	Office Worker	170
Light Equipment Operator	Proc & Sup Services	Equipment Operator/Material Handler	70
Livestock Tech	Animal & Vet Science	Livestock Worker	120
Livestock Tech	Arabian Horse Center	Livestock Worker	120
Locksmith	Facilities Management	Maintenance Worker	130
Media Production Specialist	I&IT Learning	Media Operator	150
Mobil Driver	Behavioral Science	Driver	40
Nurse(RN,RNP,LVN)	Student Health Center	Medical Worker	160
Nursery Tech	Hort/Plant & Soil Sci	Field/Grounds Worker	90
Painter	Facilities Management	Maintenance Worker	130
Parking Officer	Parking & Transportation	Public Safety Worker	190
Pharmacist	Student Health Center	Medical Worker	160
Photographer	I&IT	Photography Worker	180
Physician	Student Health Center	Medical Worker	160
Plumber	Facilities Management	Maintenance Worker	130
Police Officer	Public Safety	Public Safety Worker	190
Production Specialist	I&IT	Electronics Worker	50
Senior Safety Coordinator	Env Health & Safety	Safety Worker	210
Skilled Laborer	Facilities Management	Maintenance Worker	130
Slide Curator	Art	Photography Worker	180
Slide Curator	College of Env Design	Photography Worker	180
Technician	Physics	Laboratory Worker	110
Theater Tech	Theater & Dance	Construction Worker	10
Trainer	Athletic Department	Medical Worker	160
Tree Trimmer	Facilities Management	Field/Grounds Worker	90
TV Technician	I&IT Learning	Media Operator	150
Vanpool Driver	Facilities Management	Driver	40
Warehouse Worker	Mail Services	Equipment Operator/Material Handler	70
X-Ray Tech	Student Health Center	Radiation Worker	200

☼ Faculty in the Colleges of Agriculture, Arts, Engineering, Environmental Design, Hospitality Management, and Science please reference other Job Safety Classifications as appropriate.

Appendix II - Eye Protection Selection Chart

AMERICAN NATIONAL STANDARD Z87.1-1989









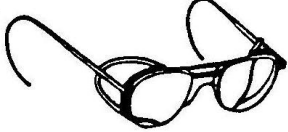


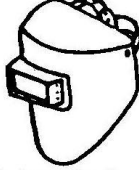



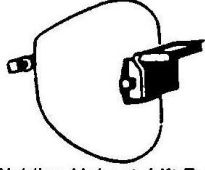
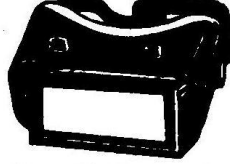
SELECTION CHART

PROTECTORS

		ASSESSMENT SEE NOTE (1)	PROTECTOR TYPE	PROTECTORS	LIMITATIONS	NOT RECOMMENDED
I M P A C T	Chipping, grinding, machining, masonry work, riveting, and sanding.	Flying fragments, objects, large chips, particles, sand, dirt, etc.	B,C,D, E,F,G, H,I,J, K,L,N	Spectacles, goggles faceshields SEE NOTES (1) (3) (5) (6) (10) For severe exposure add N	Protective devices do not provide unlimited protection. SEE NOTE (7)	Protectors that do not provide protection from side exposure. SEE NOTE (10) Filter or tinted lenses that restrict light transmittance, unless it is determined that a glare hazard exists. Refer to OPTICAL RADIATION.
	Furnace operations, pouring, casting, hot dipping, gas cutting, and welding.	Hot sparks Splash from molten metals High temperature exposure	B,C,D, E,F,G, H,I,J, K,L,*N *N N	Faceshields, goggles, spectacles *For severe exposure add N SEE NOTE (2) (3) *Faceshields worn over goggles H,K SEE NOTE (2) (3) Screen faceshields, Reflective faceshields. SEE NOTE (2) (3)	Spectacles, cup and cover type goggles do not provide unlimited facial protection. SEE NOTE (2) SEE NOTE (3)	Protectors that do not provide protection from side exposure.
C H E M I C A L	Acid and chemicals handling, degreasing, plating	Splash	G,H,K *N	Goggles, eyecup and cover types. *For severe exposure, add N	Ventilation should be adequate but well protected from splash entry	Spectacles, welding helmets, handshields
		Irritating mists	G	Special purpose goggles	SEE NOTE (3)	
D U S T	Woodworking, buffing, general dusty conditions.	Nuisance dust	G,H,K	Goggles, eyecup and cover types	Atmospheric conditions and the restricted ven- tilation of the protector can cause lenses to fog. Frequent cleaning may be required.	
O P T I C A L R A D I A T I O N	WELDING: Electric Arc		O,P,Q	TYPICAL FILTER LENS SHADE SEE NOTE (9) 10-14 Welding Helmets or Welding Shields	Protection from optical radiation is directly related to filter lens density. SEE NOTE (4). Select the darkest shade that allows adequate task performance.	Protectors that do not provide protection from optical radiation. SEE NOTE (4)
	WELDING: Gas		J,K,L, M,N,O, P,Q	SEE NOTE (9) 4-8 Welding Goggles or Welding Faceshield		
	CUTTING			3-6		
	TORCH BRAZING			3-4	SEE NOTE (3)	
	TORCH SOLDERING		B,C,D, E,F,N	1.5-3 Spectacles or Welding Faceshield		
	GLARE		A,B	Spectacle SEE NOTE (9) (10)	Shaded or Special Purpose lenses, as suitable. SEE NOTE (8)	

Eye Protection Selection Chart (continued)

PROTECTIVE DEVICES

<p>A.</p>  <p>Spectacle, No Sideshield</p>	<p>E.</p>  <p>Spectacle, Non-Removable Lens</p>	<p>I.</p>  <p>Cover Goggle, Direct Ventilation</p>	<p>N.</p>  <p>Faceshield</p>
<p>B.</p>  <p>Spectacle, Half Sideshield</p>	<p>F.</p>  <p>Spectacle, Lift Front</p>	<p>J.</p>  <p>Cup Goggle, Direct Ventilation</p>	<p>O.</p>  <p>Welding Helmet, Hand Held</p>
<p>C.</p>  <p>Spectacle, Full Sideshield</p>	<p>G.</p>  <p>Cover Goggle, No Ventilation</p>	<p>K.</p>  <p>Cup Goggle, Indirect Ventilation</p>	<p>P.</p>  <p>Welding Helmet, Stationary Window</p>
<p>D.</p>  <p>Spectacle, Detachable Sideshield</p>	<p>H.</p>  <p>Cover Goggle, Indirect Ventilation</p>	<p>L.</p>  <p>Spectacle, Headband Temple</p>	<p>Q.</p>  <p>Welding Helmet, Lift Front</p>
<p>*The illustrations shown are only representative of protective devices commonly available at the time of the writing of this standard. Protective devices do not need to take the forms shown, but must meet the requirements of the standard.</p>			
<p>M.</p>  <p>Cover Welding Goggle, Indirect Ventilation</p>			

NOTES:

(1) Care shall be taken to recognize the possibility of multiple and simultaneous exposure to a variety of hazards. Adequate protection against the highest level of each of the hazards must be provided.

(2) Operations involving heat may also involve optical radiation. Protection from both hazards shall be provided.

(3) Faceshields shall only be worn over primary eye protection.

(4) Filter lenses shall meet the requirements for shade designations in Table 1.

(5) Persons whose vision requires the use of prescription (Rx) lenses shall wear either protective devices fitted with prescription (Rx) lenses or protective devices designed to be worn over regular prescription (Rx) eyewear.

(6) Wearers of contact lenses shall also be required to wear appropriate covering eye and face protection devices in a hazardous environment. It should be recognized that dusty and/or chemical environments may represent an additional hazard to contact lens wearers.

(7) Caution should be exercised in the use of metal frame protective devices in electrical hazard areas.

(8) Refer to Section 6.5, Special Purpose Lenses.

(9) Welding helmets or handshields shall be used only over primary eye protection.

(10) Non-sideshield spectacles are available for frontal protection only.

Appendix III - Chemical Glove Selection Table

Glove Material	Applications
Butyl	A synthetic rubber material that offers the highest permeation resistance to gas and water vapors. Especially suited for use with esters and ketones.
Neoprene	A synthetic rubber material that provides excellent tensile strength and heat resistance. Neoprene is compatible with some acids and caustics. It has moderate abrasion resistance.
Nitrile	A synthetic rubber material that offers chemical and abrasion resistance-a very good general-duty glove. Nitrile also provides protection from oils, greases, petroleum products and some acids and caustics.
PVC (polyvinyl chloride)	A synthetic thermoplastic polymer that provides excellent resistance to most acids, fats and petroleum hydrocarbons. Good abrasion resistance.
PVA™ (polyvinyl alcohol)	A water-soluble synthetic material that is highly impermeable to gases. Excellent chemical resistance to aromatic and chlorinated solvents. This glove cannot be used in water or water-based solutions.
Viton®	A fluoroelastomer material that provides exceptional chemical resistance to chlorinated and aromatic solvents. Viton is very flexible, but has minimal resistance to cuts and abrasions.
SilverShield®/4H	A lightweight, flexible laminated material that resists permeation from a wide range of toxic and hazardous chemicals. It offers the highest level of overall chemical resistance, but has virtually no cut resistance.

More detailed information on chemical resistance of gloves can be found on the EH&S Web Site at <http://www.cpp.edu/~ehs/files/occupational/xls/Permrate.xls>.