

EYE AND FACE PROTECTION GUIDELINE

For eye and face protection to be effective, it must be properly selected for the job and fitted to the wearer. In general, you must be sure it fits and is cleaned and worn properly. For eye and face protection to be effective, it must be properly selected for the job and fitted to the wearer.

In general:

- Be sure it fits!
- Clean it properly!
- Wear it!

1.0 WHEN TO USE

Eye and/or face protection is required when performing any activity that may result in injury to the eye or face. Activities require eye and/or face protection with any of the following:

- Sparks, open flame and spatters
- Molten materials
- Research activities involving high energy, the possibility of flying particles, explosion or implosion of vessels
- Hazardous chemicals
- Wood or metal processing, particularly grinding, welding, chipping, sawing and sanding
- Groundskeeping (e.g., using line trimmers, leaf blowers, lawnmowers)
- Injurious radiant energy (e.g., welding, ultra-violet light, lasers and brazing)
- Any activity that creates a potential for eye or face injury

2.0 SELECTION

Any PPE used to protect the eyes or face must meet CSA Z94.3 specifications. Certification marks can be found on the lenses or frames.

Table 1: Types of eye protection





Type	Illustration	Recommended for
Class 1 -Spectacles with side shields		Protection from flying particles: from front or side
Class 2A - Goggles with direct ventilation		Protection from dusts, sparks, and flying particles coming from many angles
Class 2B - Goggles with indirect ventilation		Protection from chemical splashes, dusts, sparks, and flying particles coming from many angles
Class 6 - Face shields		Face protection from: splashes, heat, glare, and flying particles when worn over safety glasses or goggles. Face shields alone do not provide adequate eye protection

Table 2: Len colours

Lens colour	Properties	Applications & Limitations
Clear	Optically clear	<ul style="list-style-type: none"> ▪ Good for low light conditions ▪ For impact protection only ▪ Can offer UV protection
Tinted	<ul style="list-style-type: none"> ▪ Tinted lenses come in a variety of colours ▪ Reduce light transmission but may not contain any other absorbing properties 	<ul style="list-style-type: none"> ▪ Outdoor use for glare ▪ Amber lenses can enhance contrast in low light ▪ Can distort perception of colours (e.g., traffic lights)
Photochromic	Lenses darken when exposed to sunlight and lighten when indoors	<ul style="list-style-type: none"> ▪ Outdoor use for glare ▪ Might not lighten fast enough for quick transition from light to dark environments
Polarized	Lenses with polarization block reflected glare	<ul style="list-style-type: none"> ▪ Outdoor use for reflected glare light ▪ Can mask liquid crystal displays
Filters	<ul style="list-style-type: none"> ▪ Designed to filter out harmful UV and IR radiation ▪ Available in shades 1.5 to 14 	<ul style="list-style-type: none"> ▪ Used for welding, cutting, soldering, etc. ▪ Shade must be light enough to see work but dark enough to provide protection (refer to a welding specialist for specific advice)

3.0 LIMITATIONS

Eye and face protection are not infallible and if they fail serious eye injury can occur. It is essential that the proper eye/face protection is selected for each hazard. The following images show what can happen if the wrong eye protection is selected against a liquid hazard.

Comparison of the Protective Capabilities of Safety Glasses and Goggles

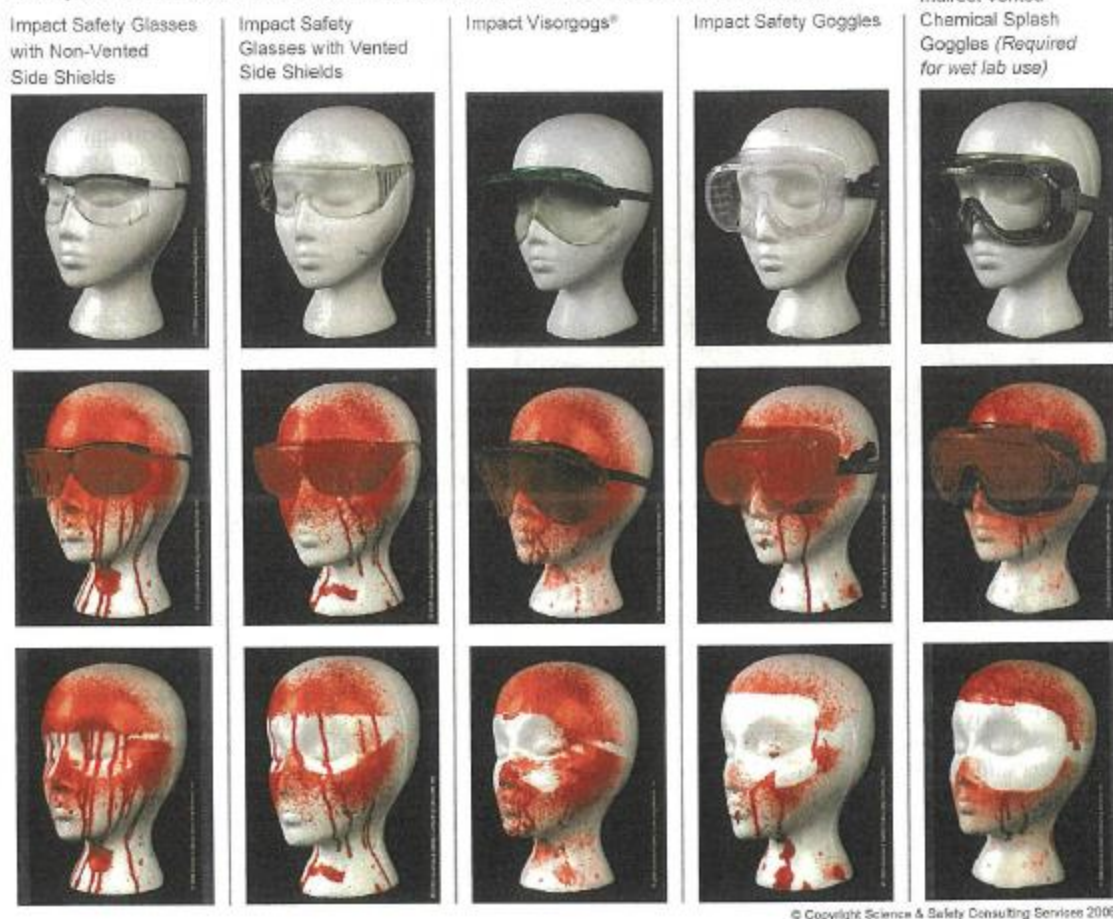


Figure 1: What can happen if the wrong eye protection is selected against a liquid hazard (Science & Safety Consulting Services, 2006)

4.0 TRAINING

Personnel required to use eye and face protection must receive basic instruction on the care, selection and use of the equipment. Before use, the lenses must be inspected for damage such as scratches, burns or abrasions. If multiple hazards exist, there must be appropriate eye and face protection for each hazard. Eye and face protection must also be stored to prevent physical damage or degradation from chemicals or exposure to sunlight.

The type of eye and face protection must be identified during initial risk assessments and included in the appropriate standard operating procedure for the task being performed.