

Did YOU KNOW

#2019-006

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Question: Did you know that gas flames produce infrared radiation?

Answer:

GAS FLAMES PRODUCE INFRARED RADIATION, WHICH MAY HAVE A HARMFUL EFFECT ON THE SKIN AND ESPECIALLY ON THE EYES. RADIANT ENERGY EXPOSURE, ALSO CALLED OPTICAL RADIATION, OCCURS WITH WORK APPLICATIONS THAT INVOLVE INTENSE CONCENTRATIONS OF ULTRAVIOLET (UV), INFRARED (IR), AND INTENSE VISIBLE LIGHT. Oxygen fuel cutting, gas welding and brazing can expose workers to this type of radiation. Exposure to UV and IR rays can damage the eyes and the skin. Sometimes damage occurs without the worker realizing it, since UV and IR radiation cannot be seen. Exposure to UV light can lead to photokeratitis, a painful experience more commonly known as snow blindness or welder's flash. Infrared and visible spectrum (bright light) radiation can penetrate through the cornea to the retina and can cause permanent retinal damage including cataracts, diminished visual acuity, and higher sensitivity to light and glare. Protect yourself while using oxy-fuel torches by wearing eye protection that has a welding filter lens designed to protect the eyes from visible, IR and UV rays. Choose the darkest shade that still allows you to complete the task. Select goggles or a mask with a tempered shaded lens to protect your eyes from injury and provide good visibility of the work. Do not allow bystanders to look directly at your work without proper eye protection.



LENS SHADES SELECTION FOR OXYGEN FUEL GAS APPLICATIONS

OPERATION	MATERIAL SIZE (INCHES)	MINIMUM PROTECTIVE SHADE NUMBER	RECOMMENDED SHADE NUMBER
Oxygen Fuel Gas Welding	≤ 1/8"	4	4 - 5
	1/8" to 1/2"	5	5 - 6
Oxygen Fuel Gas Brazing	≤ 1/2"	6	6 - 8
		3	3 - 5
Air Fuel Gas Soldering		2	2 - 4
Oxygen Fuel Gas Cutting	≤ 1	3	3 - 4
	1" to 6"	4	4 - 5
	≤ 6	5	5 - 6

*As a rule of thumb, start with a shade that is too dark to see the weld or cutting zone. Then go to a lighter shade, which gives sufficient view of the weld or cutting zone without going below the minimum.

Turn to the
 Pros

FOR MORE INFO ABOUT EYE PROTECTION
Email our Customer Service group at
custservmason@jwharris.com
or call - 1.800.733.4043.