



37545 days 1 hour Until the 2117 Transit of Venus

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2012 June 5-6 Witness the spectacle!

History Centuries of Discovery

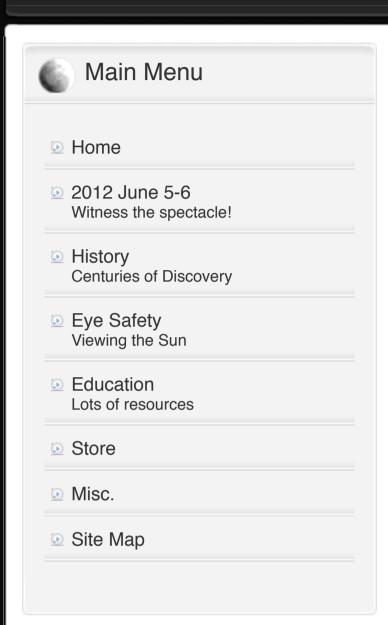
Eye Safety Viewing the Sun

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Can I Use Welding Glass to View the Sun?

Frequently Asked Questions
Can I Use Welding Glass to View the Sun?

Chuck

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See the video at http://youtu.be/4RGr9FcBrSM for definitive eye safety when viewing the sun.

Dr. B. Ralph Chou, author of *Viewing the Transit & Eye Safety*, notes a shade number 14 welder's *glass* provides suitable protection. However, this type of glass is becoming less readily available and is now a special order item. Importantly, polycarbonate welding filters now on the market are not sufficient unless they have gold coating. Polycarbonate filters without gold coating protect from high levels of visible light but are highly transparent of infrared.

It is imperative that the welding hood houses a #14 or darker glass filter. Do not view through any welding glass if you do not know or cannot discern its shade number. Be advised that welders typically use glass with a shade much less than the necessary #14. Just because the hood makes the sun somewhat more tolerable to see does not mean the welding glass is of the proper kind.

> The view through a proper #14 welding glass (left) shows only the sun, which will appear green. The surrounding landscape is not visible.

A welding glass that is less than shade #14 allows too much light to pass. In the picture at right, an insufficient welding glass permits so much light to pass

through that the landscape can be seen. This view is not safe.

TIP: Because the view should be dark, you essentially want your eyes to adapt to the darkness as if you were seeking night vision. With your body facing the sun, look down toward your feet and hold the #14 welding glass near the bridge of your nose. Slowly raise your head to meet the sun, with your eyes continuously protected by the proper filter. If you simply look toward the sun and then raise the glass in place, your eyes will need time to adjust to the sudden darkness and will be unnecessarily exposed to the sun, even if only briefly.

