Care and Use of MSA Helmets; Frequently Asked Questions and Answers

It is important that you read and carefully follow all of the instructions and warnings accompanying your helmet. Failure to follow the instructions listed on the bag provided with your helmet may result in serious injury or death. For questions concerning the care and use of your MSA helmet, contact your MSA Sales Associate or MSA Customer Service at 800-MSA-2222.

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| What electrical class does my MSA industrial helmet meet? | Three classes indicate a helmet's electrical insulation rating relative to ANSI/ISEA Z89.1-2014 and CSA Z94.1-2015 standards: Class E (electrical) tested to 20,000 volts, Class G (general) tested to 2,200 volts, and Class C (conductive) that provides no electrical protection. However, these voltage ratings are not intended as an indication of the voltage at which the helmet protects the wearer.

The following MSA Class E* helmets (electrical) are intended to reduce the danger of exposure to high voltage conductors:
- V-Gard® Cap and Hat
- V-Gard 500 Non-Vented Cap
- SmoothDome® Cap
- Topgard® Cap and Hat
- V-Gard GREEN Cap
- Super-V® Cap
- Vanguard™ Cap

*Class E ratings inherently include Class G ratings, as testing includes the lower voltage levels represented in the Class G testing procedure.

The following MSA Class G (general) helmets are intended to reduce the danger of contact exposure to low voltage conductors:
- Thermalgard® Cap
- Skullgard® Cap and Hat
- Comfo® Cap

The following MSA Class C (conductive) helmet is not intended to provide protection against contact with electrical conductors:
- V-Gard 500 Vented Cap

To what degree are MSA's industrial elevated temperature helmets rated? | The following MSA helmets were tested to radiant heat loads producing, but not exceeding, the temperatures listed below, and then immediately impacted:
- Topgard Cap and Hat 275˚ F
- Thermalgard Cap 350˚ F
- Skullgard Cap and Hat 350˚ F

Which MSA industrial helmets offer protection from arc flashes? | There is no arc flash test or standard for industrial head protection products. According to NFPA 70E-2012, a worker is required to wear a helmet rated as Class E in accordance with ANSI/ISEA Z89.1-2014 or CSA Z94.1-2015. When used in conjunction with any MSA visor and frame, all Class E MSA hard hats will perform as well as the visor, or protect the wearer to the same calorie-rating level as the visor.

What are the differences between traditional V-Gard helmets and the V-Gard GREEN helmets? | The V-Gard GREEN Helmet is similar to a traditional V-Gard helmet in that it is made of high-density polyethylene (HDPE). However, unlike traditional hard hats in which the HDPE is sourced from non-renewable sources, V-Gard GREEN Helmet shell material is sourced entirely from green HDPE, which is made of ethylene produced from sugarcane-based ethanol.

Do V-Gard GREEN helmets meet the same Standards performance criteria as the traditional V-Gard? | Yes. The V-Gard GREEN Helmet and the traditional V-Gard Helmet offer the same trusted look and quality customers have come to expect from MSA. V-Gard and V-Gard GREEN helmets are third-party SEI certified as Type I, Class E under ANSI/ISEA Z89.1-2014 and CSA Z94.1-2015.
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| **What is the service life of an MSA industrial helmet?** | MSA helmets are designed with high-quality, wear-resistant materials but do not last forever. The helmet’s protective properties will degrade by exposure to many common work environments, such as extreme temperatures, chemical exposure, sunlight, and normal daily wear. MSA recommends the following replacement schedule:  
  - **Suspension** (replace every 12 months)  
  - **Helmet** (replace every 5 years)  

To ensure that a helmet shell or suspension has not reached the end of its service life, MSA recommends the following procedure before and after each use:  
  - Visually inspect the shell for breakage, cracks, crazing, discoloration, chalky appearance, or any other unusual condition. Also, inspect the shell for brittleness by flexing the brim (do not compress the shell sides). These conditions can indicate a loss of impact, penetration, and/or electrical resistance and the helmet must be replaced immediately.  
  - The suspension should be checked for loss of flexibility. Check for cracks, breaks, frayed straps, or damaged stitching. If any of these conditions exist, the suspension must be replaced immediately.  

**NOTE:** These are recommended useful service life guidelines. Wear or damage noticed during a regular inspection may determine that an earlier replacement of the entire helmet is necessary. ALWAYS replace the helmet after it has withstood impact or penetration. The life of a Skullgard Helmet tends to exceed our suggested service life due to the increased rigidity of the helmet’s materials and areas of use. However, as with other personal protective equipment, a Skullgard Helmet’s life should ultimately be determined by routine daily inspection before and after use. |

| Why don’t MSA industrial helmets have an Ultraviolet (UV) indicator? | While there may be benefits to a UV indicator, we feel that this only tells part of the story. Other factors, such as the appearance of cracks or crazing, frayed suspension straps, or other anomalies dictate that - regardless of a UV indicator - users should perform daily inspections before and after each use. Keep in mind, too, that all MSA helmets have UV inhibitor molded into the material as it’s being manufactured to decelerate degradation caused by UV radiation. |

| What does the date code on an MSA industrial helmet represent? | The date code indicates when the shell was molded. Date codes are molded into the underside of the shell’s brim with the year and month in which that specific shell was molded. This date does not indicate a helmet’s service life; the service life begins when it is placed into service (see “What is the service life of an MSA industrial helmet?” above).  

**The following date code refers to these MSA Protective Caps/Hats:**  
- V-Gard Cap and Hat  
- V-Gard 500 Vented and Non-Vented Cap  
- V-Gard GREEN Cap  
- SmoothDome Cap  
- Topgard Cap and Hat  
- Super-V Cap  
- Vanguard Cap  
- Comfo Cap

The large number inside the circle indicates the year. The arrow inside the circle points to the outer ring of numbers that represents the month. Therefore, this specific example reads July (7th month) of 2012 (12 in center).  

**MSA Skullgard Cap and Hat**  
Four years are noted in the center, and each year is surrounded by four medallions. As each quarter of each year passes, the medallions are “dotted.” This process is continuous and read in a clockwise direction. Therefore, this specific example reads 3rd quarter (July-September) of 2013.  

**MSA Bump Cap**  
Two rings are noted around the center circle: (A) the outer ring indicates the year, and (B) the inner ring indicates the month. The smaller arrow between both rings points to the year (A), and the arrow inside the center circle points to the month (B). Therefore, this specific example reads March (3rd month) of 2013 (13 on outer ring). |
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<td>Are any MSA suspensions interchangeable among MSA industrial helmets?</td>
<td>The following MSA suspension and helmet assemblies are interchangeable and meet ANSI/ISEA Z89.1-2014 when used together.</td>
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| **MSA V-Gard Staz-On® and Fas-Trac® III Suspensions are interchangeable among these MSA helmets:** | - V-Gard Cap (standard size)  
- V-Gard Hat  
- V-Gard 500 Non-Vented Cap  
- V-Gard 500 Vented Cap  
- V-Gard GREEN Cap  
For example, a V-Gard Cap (standard size) Staz-On or Fas-Trac III Suspension can be used in a V-Gard Hat as well as a V-Gard 500 Cap (Vented and Non-Vented) and SmoothDome Cap. The same holds true for Freedom™ Series and Specialty V-Gard Caps and Hats. |
| Does the Fas-Trac® III Suspension affect the Standards compliance of my helmet assembly? | No. The Fas-Trac III has been third-party tested and certified by SEI to the Standards requirements stated on the label in MSA helmets.  
**These changes to the suspension were made to improve comfort, stability and fit:**  
- Lower nape strap improves retention; it also adjusts for a custom fit on the back of the head.  
- Three levels of nape adjustment allow desired nape fit, without interfering with line of sight or other protective gear, such as earmuffs and safety glasses.  
- Ratchet offers smooth rotation, virtually no backlash, and grippable knob that can be adjusted—even with a gloved hand!  
- Comfort pad separates the back of the ratchet from the rear of the head, cradling the head while encouraging airflow and reducing hair pulling.  
- Largest sweatband surface area on the market covers the suspension headband and user’s forehead for added comfort.  
- Optional sweatband accessory helps remove moisture and can be installed while the suspension is assembled in the helmet. |
| Can another manufacturer’s suspension be used in an MSA industrial helmet? | No. MSA caps and hats are only tested with MSA suspensions, therefore, we do not know if another manufacturer’s suspension will pass ANSI Z89.1 impact and penetration requirements when used in an MSA helmet. Suspension webbing or “crown strap” length varies depending upon crown clearance (distance between shell and suspension) necessary to meet ANSI/ISEA Z89.1-2014. In fact, lengths can vary, not only from manufacturer to manufacturer, but among MSA helmet models as well. As a result, you can only use the MSA suspension designated for a given MSA helmet model and size. |
| Can an MSA industrial helmet be purchased without a suspension?          | MSA will not sell a hard hat shell without a suspension because we label our shells with appropriate Standards information which the shell and suspension meet as an assembled product. Shells alone do not meet these standards; the shell and suspension work together in order to provide the necessary protection. |
| Can an MSA industrial helmet be worn backwards?                         | The following MSA helmets meet the requirements for the reverse donning optional feature in ANSI/ISEA Z89.1-2014:  
- V-Gard Caps and Hats  
- V-Gard GREEN Caps  
- V-Gard 500 Caps  
- SmoothDome Caps  
- Topgard Caps and Hats  
- Thermalgard Caps  
- Skullgard Caps and Hats  
Accepting models display the official reverse donning logo.  
**NOTE:** When wearing a helmet in reverse, be sure to reverse the suspension so the nape strap is facing the brim. Use caution before using accessories while wearing an MSA helmet backwards. Wearing a cap with the brim facing the rear may reduce the performance of accessories, such that they may not meet the applicable requirements. |
| Can I wear competitor helmet accessories, like visor/frame combinations and cap-mounted muffs on MSA helmets? | No. Competitor products should not be worn on MSA helmets. It is potentially unsafe to wear competitor products on MSA helmets, as competitor products may not have been tested with MSA products to ensure continued compliance with stated safety standards. Even if competitor helmet accessories appear to be compatible with MSA helmets, only MSA helmet accessories, such as the V-Gard Face Protection System and SoundControl or left/RIGHT hearing protectors, are tested and approved by MSA to ensure continued compliance for their applicable Standards in an assembly.  
Further, ANSI/ISEA Z89.1-2014 indicates that accessory/component manufacturers are responsible for proving their products do not cause another manufacturer’s helmets to fail: “The entity claiming that an accessory or replacement component, when installed, will not cause the helmet to fail the requirements of this Standard, and is responsible for providing justification upon request.” |
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<td>Can a bandana, hood, or skullcap be worn under an MSA industrial helmet?</td>
<td>A bandana, hood, or skullcap should not affect an MSA helmet’s impact properties as long as it is worn smoothly on top of the head. Caution should be taken to avoid bunching up of material, which can cause pressure points and affect the helmet’s ability to protect as designed. A ratchet suspension and/or chinstrap should be used to help ensure the best possible fit.</td>
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<td>Can a baseball cap be worn under an MSA industrial helmet?</td>
<td>MSA does not recommend placing a baseball cap between the head and the suspension; baseball caps may interfere with the helmet suspension’s capability to work properly during impact.</td>
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<td>Can anything be placed in the space between an MSA industrial helmet’s shell and its suspension?</td>
<td>Items such as gloves, cigarettes, and earplugs should never be stored between the suspension and the shell, as this space is needed in the event of an impact to ensure the energy from that impact is absorbed by the shell and suspension. Any object in this space can transmit significant forces to the head and neck that could result in serious injury or death.</td>
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<td>Can an MSA industrial helmet be painted?</td>
<td>MSA recommends that paint never be used on any helmet except for Thermalgard Caps and Skullgard Caps/Hats. Paint may attack and damage shells of other MSA industrial helmets, thereby reducing the degree of protection originally provided. Due to the inert properties of these three shells—Thermalgard and Skullgard Helmets, MSA is able to paint these shells with paints that have been qualified for such purposes.</td>
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<td>What effect if any does a logo have on an MSA industrial helmet?</td>
<td>The ink used by MSA for helmet imprinting does not affect a shell’s integrity. Once the ink is cured—approximately 24 to 48 hours after being placed onto a helmet—the ink will not flake off of the hard hat, as it then becomes part of the shell material.</td>
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<td>Do any MSA industrial helmets and/or their suspensions contain latex?</td>
<td>MSA industrial helmets as assemblies include the helmet shell and suspension. Shells are made from one of the following materials, depending upon helmet model: • Polyethylene • Phenolic • Nylon • Fiberglass • Poly carbonate All of our industrial helmet suspensions are manufactured with molded plastics and nylon webbing. Neither the suspensions nor shells contain latex.</td>
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<td>Can permanent markers be used on MSA industrial helmets?</td>
<td>MSA helmets should not be altered or modified in any way. However, it is permissible to use alcohol-based permanent markers as those markers do not contain metal pigments which may affect helmet dielectric properties. Markers, including metallic, containing butanol, diacetone alcohol, or propanol are safe for use. According to MSA’s testing, the chemicals in these markers should not have any effect upon our helmets as these are relatively fast-drying inks. However, because it is impossible for us to test all permanent markers, caution should still be taken when making use of such materials. Also be sure that the ink is not covering any damage on the helmet (i.e. cracking).</td>
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<td>Can non-metallic stickers or tape be used on MSA industrial helmets?</td>
<td>An MSA helmet should not be altered or modified in any way. However, it is permissible to use pressure-sensitive, non-metallic stickers or tape with self-adhesive backing as long as they are placed no closer than ½” from the helmet’s edge. According to MSA test results, pressure sensitive, non-metallic stickers or tape placed in such locations will not affect the burn-through (i.e. dielectric classification) of an MSA helmet's structure.</td>
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