GOOD PRACTISES for Fire Helmet Cleaning

At the FIRE SCENE

- ☑ If possible, rinse the helmet with water on site immediately after intervention
- ☑ If not possible to rinse with water, perform a dry pre-cleaning with microfiber cloths directly on site
- ☑ Put your helmet in an isolated area in order to avoid any cross contamination inside the fire truck

Back to the FIRE STATION

- ☑ Clean helmet as soon as possible after soiling following the procedures described below

Important RULES

- ☑ Always wear gloves when handling soiled equipment
- ☑ **Do not use abrasive materials to clean your helmet**
- ☑ Do not use solvent-based products (acetone, alcohol, ...) or softeners to clean your helmet

SOFT GOODS Cleaning Procedures

LEATHER Elements – without Disassembly

- ☑ Use soapy water on microfiber cloth or wet wipe (pH neutral) to scrub the different helmet components
  - Front leather padding
  - Rear leather padding
  - Leather chinstrap

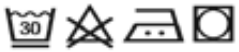
- ☑ Put helmet to ambient air dying
  The helmet must be completely dried before returning to service.

TEXTILE Elements – with Disassembly

Access our disassembly/assembly video at
https://gb.msasafety.com/galletproductinfo

- ☑ Remove components which are in contact with the firefighter's head
  - Standard helmet elements: chinstrap, rear and front padding
  - Optional helmet element: crown pad
  You can also include the neck curtain.

Neck curtains are exposed to contamination and may need to be washed more frequently than internal textile elements. Neck curtains washing conditions depend on the model of neck curtains.
If a cleaning label is on the neck curtain, follow the cleaning recommendations (temperature, type of cycle, drying conditions, ironing) as indicated in the user manual.

Model	Instructions	Washing Icons
Aluminized neck curtain GA1116F	Manual cleaning at 30°C with soapy water	
Wool / Aramid neck curtains GA1116D, GA1116H GA1116B-M,GA1116B-L	Cleaning at 30°C with a mild detergent, tumble dry and/or iron (heat activation after washing contributes to repellence performance)	
Aramid neck curtains GA1116K, GA1116J, GA1116E-M, GA1116E-L	Cleaning at 60°C with a mild detergent	

- ☑ Put components in a washing machine bag (P/N GA1173)
  Close the Velcro straps of the paddings.

- ☑ Put bag in tumbling machine and select program at maximum 40°C
  Use Clax Plus and Clax 100 Color detergents (Diversey) with the following dosing recommendations:

Detergent	Pre Wash (per kg)	Main Wash (per kg)
Clax 100 Color	8 g	8 g
Clax Plus	23 g	28 g

- ☑ Re-install textile components on GALLET F1XF helmet after drying (max. temperature 40°C)
  The helmet must be completely dried before returning to service.

HELMET Cleaning Procedures

MANUAL Cleaning Procedure – without Disassembly

Ingredients: water and soap

- ☑ Remove electronic components from helmet (lights, communication systems, ...)
- ☑ Rinse shell and interior parts (textile, shell, face shield, ocular visor) thoroughly with warm water (about 40°C)
- ☑ Use pH neutral soap and microfiber cloth or sponge (soft side) to scrub the different helmet components
  - Shell and mask attachment bracket
  - Face shield and ocular visor (inner and outer surface)
  - Internal elements (headband, chinstrap, plastic pieces)
  - Neck curtain

- ☑ Rinse thoroughly helmet with warm water (about 40°C)

- ☑ Dry helmet (max. temperature 40°C)
  - Ambient air drying => 24 hours
  - Warm room drying => several hours
  - Drying cabinet (with or without ozone) => 2 hours
    Maximum level of ozone: 0.2 ppm

Access our manual cleaning video at
https://gb.msasafety.com/galletproductinfo

The drying times are only an indication. The helmet must be completely dried before returning to service.

MECHANICAL Cleaning Procedure – without Disassembly

Fixed-basket washing machine

- ☑ In case of highly soiled helmets, proceed to manual pre-cleaning with warm water
- ☑ Remove electronic components from helmet (lights, communication systems, ...)
- ☑ Insert complete helmet into washing machine
- ☑ Select program adapted to fire helmets
  - Maximum temperature of 40°C
  - Cycle time between 3 and 8 minutes depending on the selected machine and the soiling level
  - Use the following Diversey products combination through the dosing system of the machine:
    - Suma Jade Pur-Eco L8 detergent with the following dosing: 2 ml per litre of water
    - Suma Med Neutral neutralizer with the following dosing: 0.2 ml per litre of water
      The neutralizer allows to avoid any detergent residue on the helmet components.

- ☑ Dry helmet (max. temperature 40°C)
  - Ambient air drying => 24 hours
  - Warm room drying => several hours
  - Drying cabinet (with or without ozone) => 2 hours
    Maximum level of ozone: 0.2 ppm

The drying times are only an indication. The helmet must be completely dried before returning to service.

Ozone Cabinet

This procedure has been tested and approved with Novven Ozone Cabinet.
Program and level of ozone may vary according to the cabinet brand.

- ☑ Pre-clean the helmets with soft cloth and warm water
- ☑ Remove electronic components from helmets (lights, active hearing protection, ...)
- ☑ Insert complete helmets into the cabinet
- ☑ Select program adapted to fire helmets

  - Option 1: Standard drying & cleaning program
    - Max. temperature 50°C
    - Level of ozone: 0.2 ppm
    - Cycle time: between 45 minutes and 4 hours
  - Option 2: Eco-Friendly drying & cleaning program
    - Max. temperature 45°C
    - Level of ozone: 0.2 ppm
    - Cycle time: between 2 and 6 hours

HELMET Decontamination Procedure with Ozone Cabinet

This procedure has been tested and approved with Novven Ozone Cabinet.
Program and level of ozone may vary according to the cabinet brand.

- ☑ Pre-clean the helmets with soft cloth and warm water
- ☑ Remove electronic components from helmets (lights, active hearing protection, ...)
- ☑ Insert complete helmets into the cabinet
- ☑ Select program adapted to fire helmets

  - Max. temperature 58°C
  - Level of ozone: 0.5 ppm
  - Cycle time: 2 or 4 hours

HELMET Disinfection Procedures

With Diversey Products

- ☑ In addition to regular cleaning, Diversey Oxivir® Excel™ Broad Spectrum Cleaner and Disinfectant may be used for disinfection.
  It is important to follow the cleaning manufacturer's instructions, including contact time to achieve disinfection.

  For recommendations on the method of application and details on the exact nature of the agents, please refer to the product and safety datasheets on the vendor's website

  If the indicated disinfectant is not available in your country, please refer to its technical specifications and guidance from your local authorities to find a product with equivalent concentrations of the same active ingredients that can be sourced locally.

- ☑ If in doubt, soft clothes (headband padding, chinstraps, neck curtains, etc.) should be removed and replaced by new ones.
  Please refer to the user manual for references of the corresponding spare parts.

With Ozone Cabinet

This procedure has been tested and approved with Novven Ozone Cabinet.
Program and level of ozone may vary according to the cabinet brand.

- ☑ Pre-clean the helmets with soft cloth and warm water
- ☑ Remove electronic components from helmets (lights, active hearing protection, ...)
- ☑ Insert complete helmets into the cabinet
- ☑ Select program adapted to fire helmets
  - Max. temperature 60°C
  - Level of ozone: 0.7 ppm
  - Cycle time: 45 minutes or 2 hours

The helmet cleaning, decontamination and disinfection procedures also apply to other MSA GALLET firefighting helmets (F1 evolutions and F2 evolutions).

Once cleaning, disinfection or decontamination is completed, **perform complete check of helmet with detailed inspection of each critical component** (suspension, shell, impact liner). Refer to GALLET F1XF Service and Maintenance Manual which details conformity criteria. MSA recommends to have a system for keeping minimal records for their GALLET F1XF helmets in case of repair.

Also visit our website dedicated to Firefighter Health and Safety to download our Whitepaper & Infographics about BEST PRACTICES TO HELP REDUCER FIREFIGHTER RISK.