

Volusia County Fire Services Safety Gram

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Care of Personal Protective Equipment

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When structural or brush gear is dirty from fires or motor vehicle accidents, the Personal Protection Equipment (PPE) ensemble will lose its ability to protect the wearer if not cleaned and maintained regularly. PPE that is soiled and / or worn is not a sign of a seasoned firefighter. The firefighter just reduced the thermal protection process-heat protection to a dangerous low. This may cause burns to the wearer and reduce the life of the PPE ensemble.

Structural and brush gear should be taken care of on a regular basis. Here are a few ways to take care of your ensemble:

- Elements to check for on pants and coat
 - Soiling
 - Contamination from chemicals and body fluids
 - Physical damage to outer shell and more
 - Trim damage or falling apart
 - Closure system damage from wear
- Check your hood
 - Loss of elasticity to the opening of the face area
- Check Helmets for
 - Damage to outer shell
 - Damage to skull saver and webbing
 - Shield cracked or missing
- Check gloves
 - Shrinkage
 - Liner inversion
 - Loss of flexibility
 - Cuts or holes openings to outer shell of gloves
- Check foot wear
 - Loss of water resistance
 - Damage to steel toe or shank
 - Outer material damaged

Let's continue on reviewing the proper ways to clean the PPE.

- Daily or weekly cleaning
 - Brush off debris
 - Rinse with water
 - Lightly scrub items with soft bristle brush
 - Spot clean as needed
 - Inspect outer shell, vapor barrier, and thermal barrier
 - If necessary, clean again.

Dispersion level Chart

Dispersion Range 0-40 is stable air, low fire intensity, less long range spotting.

Dispersion Range 41-70 is moderate unstable air, increased fire intensity and long range spotting.

Dispersion Range 70+ is unstable air, high amount of upper lifting, intense fire activity, potential for long range spotting and plume dominated wildfires.

Fire-line Handbook Jan.'98

Fight fire aggressively, but provide for safety first.

Initiate all action based on current and expected fire behavior.

Recognize current weather conditions and obtain forecasts.

Ensure instructions are given and understood.

Obtain current information on status.

Remain in communication with crewmembers, your supervisor and adjoining forces.

Determine safety zones and escape routes.

Establish lookouts in potentially hazardous situations.

Remain in control at all times.

Stay alert, keep calm, act decisively.

NWCG Handbook 3

- Machine Wash
 - Before washing examine the manufacturer's label
 - Chlorine bleach and chlorinated solvents SHALL NOT BE USED
 - Use cleaning solutions with a pH range of not less than 6.0 and not greater than 10.5
 - Separate and wash clean PPE items from soiled items (contaminated items SHALL be sent to Logistics for proper cleaning)
 - Wash outer shells together and inner shells together
 - Do not overload the machine
 - Pre-treat if needed
 - Fasten all closures, including pocket closures, loops, snaps, zippers, hooks, and D rings
 - Turn garment inside out and place in a mesh laundry bag
 - Wash at a temperature not more than 105° F
 - Add to detergent
 - Run one complete cycle, rinsing at least twice
 - If the machine is to be used for other than protective ensemble elements, rinse out machine by running while empty through a complete cycle with 120°F to 125°F water and detergent
- Air Dry
 - Place ensemble in an area with good ventilation
 - Do not dry in direct sunlight
- Machine Dry
 - Do not overload the machine
 - Fasten all closures
 - Turn ensemble inside out and place in a mesh laundry bag
 - If the dryer has a no-heat option, use it
 - If heat must be used, the basket temperature shall not exceed 105°F
 - If heat is used, remove garments before they are completely dry
- Hood Cleaning
 - Machine wash as stated above for coat and pants ensembles
 - Air or machine dry
 - Squeeze out excess water but do not wring
- Helmets
 - Clean helmet shell, headbands, ear covers, crown straps and suspension in a utility sink using mild detergent and water
 - Consult manufacturer for cleaning agents as required
 - Do not use solvents to clean goggles or face shields
- Gloves
 - Clean gloves in utility sink using mild detergent and water
 - DO NOT MACHINE WASH OR DRY GLOVES
 - Squeeze out excess water but do not wring
- Footwear
 - Clean foot wear in utility sink using mild detergent, water and soft brush
 - Consult manufacturer for information on strong cleaning agents
 - Air dry footwear in well-ventilated areas out of direct sunlight

Any contaminated ensemble shall be turned into Logistics for proper cleaning and decontamination. The care you give your equipment may save your life or protect you from serious harm.