



**TotalCare®**  
VERIFIED PPE MAINTENANCE

PPE Cleaning On A Whole New Level

# REDZONE<sup>SM</sup>

## CO<sub>2</sub> CLEAN

powered by



CARBON DIOXIDE (CO<sub>2</sub>) CONTAMINANT CLEANING TECHNOLOGY



### LION REDZONE CO<sub>2</sub> CLEAN PROVIDES THE MOST EFFECTIVE PPE CLEANING ON THE MARKET.

Conventional firefighting gear cleaning methods provide limited decontamination results and can take days to complete.

But, RedZone CO<sub>2</sub> Clean effectively decontaminates PPE quickly in approximately 60 minutes.

While Ozone cleaning is effective at removing biological contaminants like bacteria and viruses, RedZone CO<sub>2</sub> Clean also targets **poly-aromatic hydrocarbons (PAHs)** and **volatile organic compounds (VOCs)**. RedZone CO<sub>2</sub> Clean eliminates on average 98%\* of these “bad actors.”

RedZone CO<sub>2</sub> Clean is available exclusively from LION TotalCare® and can be used on ALL models and brands of gear – including helmets, hoods, turnouts, gloves and boots. ▶▶

\*UL Test Report 7/2022



WATER-FREE



NO DRYING



LOW TEMPS



EARTH FRIENDLY



ALL PPE BRANDS & MODELS

## CARBON DIOXIDE (CO<sub>2</sub>) CONTAMINANT CLEANING TECHNOLOGY



## The RedZone CO<sub>2</sub> Clean Advantage

### THE BENEFITS OF REDZONE CO<sub>2</sub> CLEAN INCLUDE:

- Eliminates on average 98% of PAHs and VOCs\*
- Requires no drying time
- Uses a lower cleaning temperature that reduces gear degradation, while still providing exceptional cleaning levels
- Restores the retro-reflectivity of some reflective trim
- Uses less energy and doesn't require water
- Contains no harmful cleaning agents or environmental threats

\*UL Test Report 7/2022

### PAHs - THE BAD ACTORS

## WHY REMOVING PAHs FROM YOUR FIRE GEAR IS CRITICAL

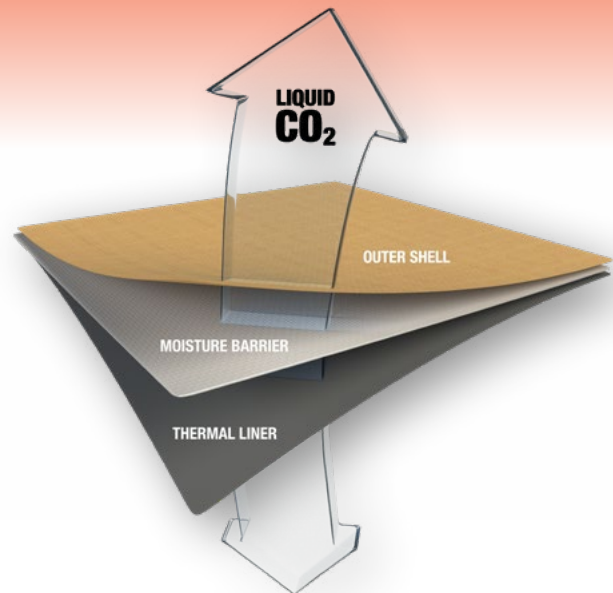
**Polycyclic Aromatic Hydrocarbons (PAHs)** are a class of chemicals that are produced by the partial burning of certain materials commonly found at typical structural fires.

PAHs can bind to or form small particles in the air and adhere to PPE during firefighting. PAHs can stay in firefighting gear even after advanced water wash cleaning. PAHs are highly absorptive through the skin.

### How can PAHs affect firefighter health?

Some PAHs are IARC Group 1 carcinogens (carcinogenic) and Group 2A (probably carcinogenic to humans). The National Institute of Occupational Safety and Health (NIOSH) has found a statistically significant increase in PAHs on the neck and increases in PAH metabolites in urine immediately after firefighting. NIOSH also published a statistical study finding that firefighters experience higher incidences of certain cancers and cancer-related deaths than the general population.

## RedZone CO<sub>2</sub> Clean Penetration



REDZONE CO<sub>2</sub> CLEAN PENETRATES ALL LAYERS OF TURNOUT GEAR MORE EFFECTIVELY THAN WATER, WITHOUT ANY DETRIMENTAL DEGRADATION TO THE GEAR.



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