

## Nomex Clothing Exposed to Poison Oak/Ivy/Sumac

### RESEARCH

At the request of the National Support Cache Refurb Committee, MTDC researched the practicality of laundering Nomex firefighting clothing that has been contaminated with urushiol oil (the allergen to which the body reacts) from poison oak/ivy/sumac exposure. Current cache practices range from normal washing procedures to disposal of shirts and pants that have known urushiol contamination.

A search of on-line sources didn't produce any special care instructions beyond normal laundering. Some examples:

- “All clothing should be laundered, and everything else that may be contaminated with urushiol should be washed thoroughly.” American Academy of Dermatology, [http://www.aad.org/public/publications/pamphlets/skin\\_poison.html](http://www.aad.org/public/publications/pamphlets/skin_poison.html)
- “...be sure to wash your clothing promptly with detergent...” MayoClinic, <http://www.mayoclinic.com/health/poison-ivy/DS00774/DSECTION=prevention>
- “Washing clothes with ordinary laundry soap will remove urushiol.” Missouri Department of Conservation, <http://mdc.mo.gov/conmag/2005/03/50.htm>

A phone conversation with Daniel Boelman, RN, BSN, the Customer Service Manager with Zanafel Laboratories, Inc. also indicated no special treatment beyond normal laundering (Zanafel produces a commercially available poison oak/ivy cream). Mr. Boelman recommended using vinyl gloves when handling contaminated clothing.

On 11/17/2008 the Forest Service filed a SAFENET Supplemental Corrective Action concerning poison oak reactions experienced by firefighters during the 2008 fire season in California. <http://safenet.nifc.gov/safenet.nsf/3e5de74de3df7e0087256c00000dbf79/BB5CAA2EF216986687257505000C39B1?OpenDocument>

In that posting, it is recommended that “All clothing and equipment should be laundered immediately ... A degreaser was recommended for helping to remove urushiol from clothing and equipment.”

### RECOMMENDATION

MTDC recommends that fire clothing contaminated with urushiol oil be cleaned following normal Nomex laundering procedures. Extra care should be exercised when handling the contaminated clothing. Clearly labeled plastic bags should be used to separate contaminated clothing from other returned clothing. Commercial laundry personnel should wear long sleeves and vinyl gloves when handling contaminated clothing and dispose of any bags used for transporting the clothes to the laundering facility. As an extra precaution, supply cache and laundry workers could apply an over-the-counter skin-barrier product that contains bentoquatam (such as Ivy Block or Stokoguard) before handling contaminated clothing. Bentoquatam helps prevent urushiol from penetrating the skin. After exposure, workers' clothes should be washed and gloves disposed of.