



Wearing Synthetic Fiber Underwear Under the Nomex CVC Uniform

By Mr. Larry T. Hasty

A question that surfaces frequently among combat vehicle crewmen (CVC) is whether it is safe to wear underwear made with synthetic fibers such as polypropylene or polyester under the Nomex® CVC uniform. The answer is no—it can be a safety hazard in a fire.

This includes the new moisture-wicking T-shirt the Army is fielding. Nylon melts at about 480 degrees Fahrenheit, and other synthetics melt at 300 degrees Fahrenheit. Heat transfer through Nomex, which resists temperatures up to 700 degrees Fahrenheit, could be high enough to melt these synthetic undergarments.

An Army chief warrant officer quoted in the February 1995 issue of *Flightfax*, an Army aviation risk management publication, regarding his experience when his aircraft caught fire highlights this safety issue. “My chest, back, and buttocks were spared from any burns at all due to the cotton underwear that I had on. The burn literally went to where the underwear was and stopped. If I hadn’t been wearing my Nomex protective equipment and wearing it properly, there is no doubt in my mind that I would very probably have either died in the fire or died as a result of the burns I would have received.”

For protection, either wear underwear made of 50 percent cotton and 50 percent wool or of 100 percent cotton. These natural fibers won’t melt and will provide protection that will keep the heat away from your body in a flash fire. Recommended items and their national stock numbers (NSNs) are shown in the table.

Keep the Nomex CVC uniform clean. Oil, grease, or household starch will cause the fabric to burn. Dry cleaning or laundering to remove these contaminants will restore the uniform’s fire retardant properties.

Don’t be the soldier who survives a vehicle fire only to find yourself with melted polypropylene stuck to your skin. Worn properly, the CVC uniform will protect you from burns should the unexpected happen in your combat vehicle. For more information on this subject or other CVC clothing and individual equipment, contact the Assistant TRADOC Systems Manager-Soldier at Fort Knox, Kentucky: Lieutenant Colonel Craig Carson, at (502) 624-3519, DSN 464-3519 or e-mail <craig.carson@knox.army.mil>; or Mr. Larry T. Hasty at (502) 624-3662, DSN 464-3662, or e-mail <larry.hasty@knox.army.mil>.

NSNs for Recommended Items

Drawers, 100% cotton, cold weather

8415-01-051-1175 X-Small
8415-00-782-3226 Small
8415-00-782-3227 Medium
8415-00-782-3228 Large
8415-00-782-3229 X-Large

Undershirt, 100% cotton, cold weather

8415-01-051-1174 X-Small
8415-00-270-2012 Small
8415-00-270-2013 Medium
8415-00-270-2014 Large
8415-00-270-2015 X-Large

Undershirt, flyers, man, Aramid

8415-01-043-8375 X-Small
8415-00-485-6547 Small
8415-00-485-6548 Medium
8415-00-485-6680 Large
8415-00-485-6681 X-Large

Drawers, flyers, Aramid

8415-01-043-4036 X-Small
8415-00-467-4075 Small
8415-00-467-4076 Medium
8415-00-467-4078 Large
8415-00-467-4100 X-Large

Gloves, combat vehicle crewman

8415-01-074-9428 Size 5
8415-00-074-9429 Size 6
8415-00-074-9430 Size 7
8415-00-074-9431 Size 8
8415-00-074-9432 Size 9
8415-00-074-9433 Size 10
8415-00-074-9434 Size 11

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