

Environmental Effects on Body Armor

By

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The environmental effects on body armor have been a topic of discussion since Kevlar was introduced in the early seventies. The introduction of Kevlar and all subsequent fibers (Twaron, Spectra, and Dyneema) have been scrutinized as well. In each case, individuals have voiced concerns that the performance of each of these products has endangered the lives of police officers. The newest addition to the ballistic fiber family, Zylon, is no exception. Fortunately as in the past, officers have waited until factual evidence has been judiciously evaluated by proven non-commercial experts in the field such as the National Institute of Justice (NIJ) before determining if their vests are safe. As a result, over 2600 officers are alive today as a result of them wearing their body armor. **“Wear Your Body Armor”**.

Some have called into question the intentions of the NIJ. The NIJ has been the friend to Law Enforcement and represents the best interests of police throughout the nation and have been steadfast in performing their duties, even under fire. Some years ago, an industry group wanted to set body armor standards on their own. They paraded around the country, much as the present self appointed scientist are doing just now, and tried to take control of body armor standards. The NIJ stepped forward and brought police and the manufacturers together and today we have a significantly improved Body Armor Standard 0101.04 administered by the NIJ, not an industry trade association.

The NIJ and the Law Enforcement and Corrections Standards Program is sponsored by the Office of Science and Technology of the National Institute of Justice (NIJ), U.S. Department of Justice. The program responds to the mandate of the Justice Improvement Act of 1979, which directed the NIJ to encourage research and development to improve the criminal justice system and to disseminate the results to Federal, State and local agencies. The present standards for body armor are administered by NIJ and they have an advisory council LETAC and an advisory board (NAAB), currently comprised of representatives from Law Enforcement, Fiber Manufacturers, Weavers and Police Unions:

- Teijin Twaron Fibers, Inc.
- Armor Holdings, Inc.
- California Department of Corrections
- Chesterfield County Police Department, VA
- Department of Justice
- DHB Armor Group
- Dupont Advanced Fiber Systems
- Federal Bureau of Investigation
- Fraternal Order of Police

- Hexcel Schwebel High Performance Fibers
- Honeywell/Allied Signal
- International Association of Chiefs of Police
- International Brotherhood of Police Officers
- National Association of Police Organizations
- National Sheriffs Association
- Office of Community Oriented Policing Services
- U.S. Armor Corporation
- U.S. Secret Service, TSD/P&D

Most importantly, body armor standards are designed by police for police. Many other technical investigations have police oversight at NIJ. To study the short and long term environmental effects of materials on ballistic performance, takes the best of trained and skilled scientist. These tests must be run by people not only skilled in ballistics but also in statistics, physics and other key laboratory processes. To have groups of quasi experts direct police instead of the NIJ is going back to the old ways that failed before. These people, while thinking they are good citizens are actually placing un-substantiated doubts in the minds of Law Enforcement and this could get someone hurt if police decide not to wear their vest. NIJ has been conducting tests to determine the environmental effects on body armor and are to provide a report soon on their findings. This is where such testing should be done. Find the information at www.nlectc.org/testing/ba_enviornmental.

We urge you to listen to the NIJ when there are questions of this nature as they are unbiased in their support of Law Enforcement, working for Law Enforcement. They have significant work in progress to determine the facts about the environmental effects on body armor. Until they complete their review, do as they request: "WEAR YOUR BODY ARMOR" because your greatest risk is not wearing it.