

Test Protocol for the Compatibility of SABRE® Law Enforcement Aerosol Projectors with the M26 TASER® Electronic Immobilization Device

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Proud Manufacturer's of SABRE® Aerosol Projectors



The Truth about Aerosol Flammability

Why the need for the H2O Series?

The demand for compatible aerosol projectors exists among agencies using electronic immobilization devices (EID). Though the SABRE® DPS series has successfully passed the EPA Flame Extension Test, Security Equipment Corporation (SEC) does not recommend agencies use some of the SABRE DPS Series formulations in conjunction with these devices. (For additional information on DPS compatibility, please contact Robert Nance, V.P. of Operations at 800-325-9568.)

The methods of flammability testing which have been completed on SABRE® Law Enforcement aerosol projectors include:

- 16 CFR 1500.45 Flame Extension tests
- Spraying a burning rag with the SABRE® aerosol projector to determine flammability
- Using a high voltage stun gun on a t-shirt which has been saturated with the SABRE® aerosol projector
- M26 Taser® Worst-Case-Scenario

Both series of SABRE® aerosol projectors pass the EPA Flame Extension Test. The SABRE® H2O Series extinguishes the burning rag and does not ignite the saturated t-shirt when shocked with a stun gun. The SABRE® DPS Series does not extinguish the burning rag, it does not extend the flame, and will not ignite the saturated t-shirt when shocked with a stun gun, (not the M26 Taser®).

M26 TASER® Compatibility Test Scenario

Security Equipment Corporation contacted Steve Tuttle, Director of Government & Law Enforcement Affairs for TASER® International. Mr. Tuttle identified the testing process required to most accurately determine the compatibility of M26 TASER® and SABRE® Law Enforcement Aerosol Projectors. The purpose of the test was to identify the worst-case scenario when using SABRE® Aerosol Projectors and the M26 TASER® device. The worst-case scenario is defined in two separate cases.

M26 Taser® Test Case 1

The first test case involves a subject being saturated with the SABRE® aerosol projector on the chest area. Saturation is defined as six to eight one second bursts with a MK3 or MK4 and one or two bursts in a MK9 riot control canister. The center of the t-shirt becomes completely soaked in a 12-inch diameter. The M26 Taser® prongs are then attached to the saturated area of the t-shirt one to two inches apart. This scenario represents the highest pulse in the shortest area, meaning the greatest amount of electricity or possibility for ignition in the smallest most saturated area.



Test case one is defined as a potential worst-case scenario for the following reasons:

1. SABRE's Training Program stipulates a maximum of three one-second burst be applied to a subject. The bursts are aimed at the forehead, eyes, nose and mouth. A small amount of formulation may contact the subjects clothing. In this test case, the number of one-second bursts is double to triple the mandated training maximum, and the bursts are concentrated in the chest area. In most cases, the spray would only be fired at a subject's facial area.
2. Taser International recommends firing the M26 Taser® prongs into the subject's center mass or chest area. Therefore, under normal circumstances, the SABRE® aerosol projector will not come in contact with the M26 Taser® immobilization prongs. Also, the M26 Taser® prongs are designed to separate at 8 degrees from the firing point. Depending on the distance from the subject, the prongs could land twelve inches or more apart vertically.
3. The one to two inch separation also represents the officer's ability to use the M26 Taser® as a stun gun when the cartridge is removed. Therefore, the potential for ignition at that degree of separation would be greatest.

M26 Taser® Test Case 2

The second test case involves a subject saturated with the SABRE® aerosol projector in the chest area. The M26 Taser® prongs are then attached to the saturated area of the t-shirt one to two inches apart. While the M26 Taser® is being deployed, the subject is also sprayed continuously with the SABRE® aerosol projector on the M26 Taser® prongs until the unit is completely empty or the electronic pulses have subsided. This scenario represents the highest pulse in the shortest area, meaning the greatest amount of electricity or possibility for ignition in the smallest most saturated area while the aerosol is being applied directly to the M26 Taser® prongs. This scenario would be the worst-case scenario indicating the greatest possibility for ignition to occur.

Test case two is defined as a potential worst-case scenario for the following reasons:

1. SABRE's Training Program stipulates a maximum of three one-second bursts be applied to a subject. The bursts are aimed at the forehead, eyes, nose and mouth. A small amount of formulation may contact the subjects clothing. In this test case, the number of one-second bursts is double to triple the mandated training maximum, and the bursts are concentrated in the chest area. Furthermore, the SABRE® projector is fired at the M26 Taser® prongs while the M26 Taser® is deployed. SABRE® training stipulates SABRE® should not be deployed while the M26 Taser® is being deployed, nor should they be fired at the electronic pulse of the M26 Taser®.
2. Taser® recommends firing the prongs into the subject's center mass or chest area. Therefore, under normal circumstances, the SABRE® aerosol projector would not come in contact with the M26 Taser® immobilization prongs.



3. The one to two inch separation also represents the officer's ability to use the M26 Taser® as a stun gun when the cartridge is removed. Therefore, the potential for ignition at that degree of separation would be greatest.
4. This scenario represents the full capacity of the SABRE® aerosol projector and the M26 Taser® electronic immobilization device in the smallest concentrated area at the same time. This represents the greatest possibility of ignition.

The results from the M26 Taser® compatibility test show that the SABRE® H2O Series Sprays are fully compatible with the M26 Taser® Electronic Immobilization device. The SABRE® DPS Series are not fully compatible with the M26 Taser®. Use of some of the SABRE DPS Series models with an EID could result in injury. Therefore, Security Equipment Corporation recommends that not all SABRE® DPS Series Products be used in conjunction with the M26 Taser®.

SABRE EID Compatible Products

SABRE offers an EID compatible solution is stream, foam & cone.

All H2O Stream Delivery (MK-2, MK-3, MK-4, MK-6, MK-9)

All H2O Foam Delivery (MK-2, MK-3, MK-4, MK-9)

DPS Cone Delivery (MK-2, MK-3, MK-4)

SABRE Non EID Compatible Products

All DPS Stream Delivery (MK-2, MK-3, MK-4, MK-6)

DPS Heavy Fog Blast (MK-9)

Beginning 8/1/03 the EID Compatibility status is clearly marked on all SABRE canisters. Agencies with SABRE canisters which were purchased prior to 8/1/03 and do not mention EID compatibility should disregard the above lists and do the following:

- 1). Contact Robert Nance at 800-325-9568 (V.P. of Operations)
- 2). Perform the M26 Taser® test documented above with their OC.

SECURITY EQUIPMENT CORPORATION STRONGLY RECOMMENDS AGENCIES USING BOTH AEROSOL PROJECTORS AND ELECTRONIC IMOBILIZATION DEVICES CONDUCT THEIR OWN, WELL DOCUMENTED COMPATIBILITY TESTING BEFORE ESTABLISHING AGENCY USE OF FORCE GUIDELINES!

