



TECHNICAL BULLETIN

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Aerosol Flammability & Low Current Electrical Discharge Weapons

In 1991, Defense Technology/Federal Laboratories® received a patent on First Defense® Pepper Spray, a non-flammable aerosol comprised of all food-grade ingredients. At that time, First Defense® was guaranteed to be non-flammable. Due to the growing popularity of low current electrical discharge weapons, there is a renewed interest in the flammability of aerosol defense sprays. Examples of these weapons include but are not limited to the Taser® M26, Taser® X26, and various models of stun guns and control shields.

Flammability can be defined in multiple ways. Previously, the non-flammable guarantee of DT/FL aerosol sprays like First Defense® was based upon government standards set forth by the Consumer Product Safety Commission.

16 CFR 1500.45: Method for determining extremely flammable and flammable contents of self-pressurized containers.

In this bulletin, DT/FL expands the definition of flammability to include: ***The ability of a low current electrical discharge weapon to ignite vapors or residue from an aerosol defense weapon manufactured by Defense Technology/Federal Laboratories®.*** As new force applications have emerged, Defense Technology/Federal Laboratories® has conducted safety tests on its aerosol formulations. The following information is a chart identifying the Defense Technology/Federal Laboratories® formulations we have tested. Based upon the stated definitions of flammability and the foreseeable circumstances when these devices will be used, we have ruled out possibility of flammability for the following formulations:

Formulation	Type	Delivery System	Flammability
First Defense®	OC	Nitrogen Propelled Stream	NO
Pepper-10™	OC	Nitrogen Propelled Stream	NO
5.5 Pepper Mace®	OC	Nitrogen Propelled Stream	NO
Pepper Foam	OC	HFC134a Propelled Foam	NO
Guardian® LE-10®	OC	HFC134a Propelled Stream	NO
Guardian® LE-10®	OC	HFC134a Propelled Foam	NO
Guardian® LE-10®	OC	HFC134a Propelled Fog	NO
BodyGuard®	OC	HFC134a Propelled Fog/Cone	NO