

# As real as you can get™

WITH 9 MM AND 5.56 MM FX® NON-MARKING CARTRIDGES

FX® – the world's most interactive combat training system for the ultimate level of realism!

The FX® Non-Marking Cartridges are the core of this training system with their unique telescopic design and patented reduced-energy technology. These non-lethal rounds are fired with a weapon conversion kit for safe and reliable training. For use in areas or situations where marking is not desirable.

# FX®



### The FX® Non-Marking Cartridges have many impressive features:

- Designed for military, law enforcement and approved range programs
- Non-toxic and non-lethal projectile
- Physical impacts awareness allow accurate assessment of simulated lethality
- Tactically accurate for close ranges
- Realistic recoil
- No special ballistic infrastructure is required
- Optimal for training any time, any place, indoors and outdoors
- Used with FX® protective equipment including mandatory head, throat and groin protection

### In addition, the Simunition® conversion kits:

- User-installed temporary weapon conversion; no tools required
- Safe design helps preclude the chambering and firing of lethal ammunition
- Work with the user's service weapon without adding extra weight
- Realistic weapon functioning in semi and fully-automatic modes
- Available for a variety of pistols, revolvers, rifles, shotguns and submachine guns

### The FX® Marking Cartridges are ideal for training:

- For use in areas or situations where marking is not desirable
- Reality-based, force-on-force interactive scenarios
- Force-on-target training; practically anywhere
- Weapon safety handling training
- Urban fighting (MOUT/FIBUA)
- Anti-terrorism
- Convoy protection tactics
- Compatible with laser-based training simulators
- Patrol exercises
- Close-quarter battle (CQB)
- Shoot/No shoot decisions
- Individual/Team situations
- Room/Building/Trench clearing
- Mission rehearsal

### FX® Scenario Instructor and Safety Certification Course:

- Highly qualified professional trainers
- Offered worldwide: check our website at [www.simunition.com](http://www.simunition.com) for more information on available courses



 **SIMUNITION**

SIMUNITION, Safety as The Standard™

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## WITH 9 MM AND 5.56 MM FX® NON-MARKING CARTRIDGES

COMPONENTS	9 x 19 mm FX® Non-Marking	5.56 x 45 mm FX® Non-Marking
Projectile mass	0.2 gram (3 grains)	0.115 gram (1.77 grains)
Projectile material	Plastic	Plastic
Cartridge case	Copper alloy	Copper alloy
Sabot	Plastic	Plastic
Primer	Small pistol TOXFREE® primer	Small Rifle TOXFREE® primer
Propellant	Single or double-base smokeless powder	Single or double-base smokeless powder
<b>BALLISTIC DATA</b>		
Average velocity at 3.5 m, at 21°C (70°F)	130-190 m/s (425-625 fps) depending on weapon used	170-220 m/s (558-722 fps)
Accuracy (indoor range) at 21°C (70°F)	15 cm (6 in.) at 5 m (16.4 ft.) extreme spread	20 cm (8 in.) at 10 m (33 ft.) extreme spread
Safety template	90 m (292 ft.)	75 m (246 ft.)
Projectile Energy at 3.5 m	1.7-3.6 joules (1.2-2.7 foot-pounds)	1.7-2.8 joules (1.2-2.1 foot-pounds)
Maximum Effective Range for Training	Approximately 10 m (33 ft.)	Approximately 10 m (33 ft.)
<b>TERMINAL EFFECT</b>		
Lethality	Non-lethal bruises, welts or scrapes	Non-lethal bruises, welts or scrapes
<b>USE</b>		
General	For use with Simunition® conversion kit only	For use with Simunition® conversion kits only
Operational temperature range	-8° to 40° C (18° to 104° F)	-8° to +40° C (18° to 104° F)
Mandatory safety equipment	Head, throat and groin protection	Head, throat and groin protection
Firing modes	Single shot for pistols; single shot, burst and full automatic for submachine guns	Single shot, burst and full automatic
Weapons	The ammunition will function (feed and cycle) in a wide variety of weapons for most popular law enforcement and military models. Please refer to <a href="http://www.simunition.com">www.simunition.com</a> for a detailed listing of available models.	M4/M16, C7/C8
<b>STORAGE</b>		
Recommended storage	Cool, dry environment, 25° C (77° F) max.	Cool, dry environment, 25° C (77° F) max.
Shelf life	Five years in original packaging	Five years in original packaging
Warranty	One year	One year

### Guidelines for use:

- Intended only for supervised training conducted in accordance with Simunition® safety training protocols by law enforcement, military and Simunition® approved commercial range programs (in selected markets)
- Use only under the direction of a qualified Simunition® training safety officer
- Use only in firearms which have been converted with a Simunition® conversion kit
- Clearly identify converted weapons with FX® blue tape on the trigger guard, grip and on the magazine
- Simunition® recommends a minimum 1-ft. (30 cm) stand-off distance when firing 9 mm at protected personnel
- Users must wear approved FX® protective gear (head, throat and groin protection). Full-body covering recommended
- Improper use can cause serious injury or damage
- General Dynamics assumes no responsibility for injuries, loss or damage resulting from misuse of this ammunition

Dimensions, weights and velocities are nominal. US Patent no. 5,677,505 and 5,492,063; also Patented or Patents Pending in numerous other countries.

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**SIMUNITION**

[www.simunition.com](http://www.simunition.com)

[www.gd-otscanada.com](http://www.gd-otscanada.com)

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