

**SIMUNITION**

# 9MM AND 5.56MM FX<sup>®</sup> NON-MARKING CARTRIDGES

AS REAL AS YOU CAN GET™

## FX<sup>®</sup> NON-MARKING CARTRIDGES

FX<sup>®</sup> – the world's most interactive combat training system for the ultimate level of realism! The FX<sup>®</sup> 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.

### THE FX<sup>®</sup> NON-MARKING CARTRIDGES HAVE MANY IMPRESSIVE FEATURES:

- > Designed for military, law enforcement and approved range programs
- > Non-toxic and non-lethal cartridges
- > 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<sup>®</sup> 9000 series Protective Personal Equipment

### IN ADDITION, THE SIMUNITION<sup>®</sup> CONVERSION KITS:

- > User-installed temporary weapon conversion; no tools required

- > Safe design diminishes the possibility of firing 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<sup>®</sup> NON-MARKING CARTRIDGES ARE IDEAL FOR:

- > Use in areas or situations where marking is not desirable
- > Reality-based, force-on-force interactive scenarios
- > Force-on-target training; practically anywhere
- > Compatible with laser-based training simulators
- > Weapon safety handling training
- > Urban fighting (MOUT/FIBUA)
- > Anti-terrorism
- > Convoy protection tactics
- > Patrol exercises
- > Close-Quarter Battle (CQB)
- > Shoot/no shoot decisions
- > Individual/team situations
- > Room/building/trench clearing
- > Mission rehearsal



### FX<sup>®</sup> SCENARIO INSTRUCTOR AND SAFETY CERTIFICATION COURSE:

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

COMPONENTS	9mm x 19mm FX® GEN2 NON-MARKING	5.56mm x 45mm FX® NON-MARKING
Caliber	9mm	5.56mm
Projectile mass	Approximately 0.265g (4 grains)	Approximately 0.115g (1.8 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
BALLISTIC DATA*		
Velocity at 3.5m at 21°C (70°F)	Approximately 120-190m/s (360-623fps)	Approximately 160-200m/s (525-656fps)
Accuracy (indoor range) at 21°C (70°F)	Can achieve 2.5cm (1in) at 7.6m (25ft) extreme spread	Can achieve 20cm (8in) at 30m (100ft), shoulder fired
Safety template: no wind, no elevation	90m (295ft)	110m (360ft)
Impact energy at 3.5m (12ft)	1.9 - 4.8J	1.8 - 2.3J
Maximum effective range for training	Approximately 10m (33ft)	Approximately 30m (98ft)
TERMINAL EFFECT		
Lethality	Non-lethal bruises, welts or scrapes	Non-lethal bruises, welts or scrapes
USE		
General	For use with Simunition® certified conversion kit only	For use with Simunition® conversion bolt only
Operational temperature range	-8°C to 40°C (18°F to 104°F)	-8°C to 40°C (18°F to 104°F)
Mandatory personal protective equipment, Simunition® approved	Simunition® approved head, eye, throat and groin protection	Simunition® approved head, eye, throat and groin protection
Firing modes	Single shot for pistols; single shot, burst and fully automatic for submachine guns	Single shot, burst and fully-automatic
Weapons	The ammunition will function (feed and cycle) in a wide variety of Simunition® converted weapons and with most popular law enforcement and military models	Colt-style M4/M16, AR-15, SIG MCX, C7/C8, H&K416
STORAGE		
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

\* Dimensions, weights and velocities are nominal. Values are dependent on type of weapon, barrel length, rifling, cleanliness, and shall not be used for lot acceptance.

Please refer to [www.simunition.com](http://www.simunition.com) for a detailed listing of available models

#### 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 select 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 1ft (30cm) stand-off distance when firing 9mm FX® at protected personnel
- Simunition® requires a minimum 3ft (1m) stand-off distance when firing clipped 5.56mm FX® Marking Cartridge and 6ft (2m) for linked 5.56mm FX® Marking Cartridge at protected personnel
- Users must wear approved FX® Personal Protective Equipment (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

**SIMUNITION, SAFETY AS THE STANDARD®**  
[WWW.SIMUNITION.COM](http://WWW.SIMUNITION.COM)



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