

**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
- > 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<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® NON-MARKING	5.56mm x 45mm FX® GEN2 NON-MARKING
Caliber	9mm	5.56mm
Projectile mass	Approximately 0.18g (3grains)	Approximately 0.2g (3.1grains)
Projectile material	Plastic	Polymer front and back shell coupled by a brass ring
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>		
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)	15cm (6in) at 5m (16.4ft) extreme spread	20cm (8in) at 30m (100ft), shoulder fired
Safety template: no wind, no elevation	90m (295ft)	110m (360ft)
Projectile energy at 3.5m (12ft)	1.5 - 3.25joules (1.1 - 2.4ft-pounds)	2.6 - 4 joules (1.9 - 2.95 ft-pounds)
Maximum effective range for training	Approximately 10m (33ft)	Approximately 30m (98ft)
<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® 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
<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
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

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

\* Dimensions, weights and velocities are nominal. Values are dependent on type of weapon, barrel length, rifling, cleanliness, etc.

#### 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®**  
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