

**SIMUNITION™**

# 9MM FX® MARKING CARTRIDGES

AS REAL AS YOU CAN GET™



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

The FX® 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.

## THE FX® MARKING CARTRIDGES HAVE MANY IMPRESSIVE FEATURES:

- > Designed for military, law enforcement and approved range programs
- > Non-toxic and non-lethal projectile
- > Detergent-based, water-soluble color marking compound
- > Color options: red, blue, green, orange, white, yellow and non-marking
- > Visible impacts 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 certified FX® 9000 series Personal Protective Equipment

## IN ADDITION, SIMUNITION® CONVERSION KITS:

- > Have optic-ready pistol conversion kits now available
- > User-installed temporary weapon conversion; no tools required
- > Safe design diminishes the possibility of firing live 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, grenade launchers, rifles, shotguns and submachine guns

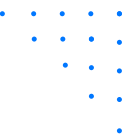
## THE FX® MARKING CARTRIDGES ARE IDEAL FOR TRAINING:

- > 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
- > Courses are offered worldwide. Visit [www.simunition.com](http://www.simunition.com) for more information on available courses



# SIMUNITION™

COMPONENTS	9MM x 19MM FX® MARKING CARTRIDGE
Projectile mass*	0.4g (6.2grains)
Projectile material	Plastic
Cartridge case	Copper alloy
Sabot	Plastic
Marking compound	Non-toxic, detergent-based, water-soluble
Marking color	Red, blue, green, yellow, orange and white
Primer	Small pistol primer or ToxFree® primer
Propellant	Single or double-base smokeless powder
BALLISTIC DATA*	PISTOL, SMG, RIFLE, SHOTGUN, GRENADE LAUNCHER
Average muzzle velocity at 21°C (70°F)	110-160m/s (360-524fps), depending on weapon
Accuracy (indoor range) at 21°C (70°F)	15cm (6in) at 7.6m (25ft) extreme spread
Maximum range no wind, no elevation	150m (492ft)
Penetration in 20% gelatin	None
Muzzle energy (at 3.5m)	2.4-5 joules (1.77-3.76ft-pounds)
Trajectory match	Mean point of impact 15cm (6in) lower than ball at 7.6m (25ft)
TERMINAL EFFECT	
Lethality	Non-lethal bruises, welts or scrapes
USE	
General	For use with Simunition® Conversion Kit only
Operational temperature range	-8° to 40°C (18° to 104°F)
Mandatory Personal Protective Equipment, Simunition® approved	Head, throat and groin protection
Firing modes	Single shot for pistols; single shot, burst and full automatic for submachine guns
Weapons	The ammunition will function (feed and cycle) in a wide variety of weapons for most popular law enforcement and military models. <i>Please refer to <a href="http://www.simunition.com">www.simunition.com</a> for a detailed listing of all available models.</i>
STORAGE	
Recommended storage	Cool, dry environment, 25°C (77°F) max.
Shelf life	Five years, in original packaging
Warranty	One year

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

## 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® Marking cartridges at protected personnel
- Users must wear approved FX® 9000 series 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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**GENERAL DYNAMICS**  
Ordnance and Tactical Systems-Canada

1 450 581 5999  
Management System Certified  
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↑ [www.gd-otscanada.com](http://www.gd-otscanada.com)

USA

**GENERAL DYNAMICS**  
Ordnance and Tactical Systems

1 860 404 0162  
1 800 465 8255 (USA Only)

↑ [info@simunition.com](mailto:info@simunition.com)