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
- Choice of 6 colors: red, blue, green, orange, white and yellow. FX® Non-Marking also available
- Visible and 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:

- 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 for more information on available courses

SIMUNITION, Safety as The Standard™
As real as you can get™
WITH 9 MM AND .38 CAL. FX® MARKING CARTRIDGES

COMPONENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>9 x 19 mm FX®</th>
<th>.38 / .357 cal. FX®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projectile mass</td>
<td>0.5 gram (7 grains)</td>
<td>0.65 gram (10 grains)</td>
</tr>
<tr>
<td>Projectile material</td>
<td>Plastic</td>
<td>Plastic</td>
</tr>
<tr>
<td>Cartridge case</td>
<td>Copper alloy</td>
<td>Copper alloy</td>
</tr>
<tr>
<td>Sabot</td>
<td>Plastic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Marking compound</td>
<td>Non-toxic, detergent-based, water-soluble</td>
<td>Non-toxic, detergent-based, water-soluble</td>
</tr>
<tr>
<td>Marking color</td>
<td>Red, blue, green, yellow, orange and white</td>
<td>Red and blue</td>
</tr>
<tr>
<td>Primer</td>
<td>Small pistol primer or TOXFREE® primer</td>
<td>Small pistol primer</td>
</tr>
<tr>
<td>Propellant</td>
<td>Single or double-base smokeless powder</td>
<td>None</td>
</tr>
</tbody>
</table>

BALLISTIC DATA

<table>
<thead>
<tr>
<th>Data Type</th>
<th>9 x 19 mm FX®</th>
<th>.38 / .357 cal. FX®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average muzzle velocity at 21°C (70°F)</td>
<td>110-150 m/s (360-490 fps); dependent weapon</td>
<td>90-130 m/s (300-425 fps)</td>
</tr>
<tr>
<td>Accuracy (indoor range) at 21°C (70°F)</td>
<td>9 cm (3.5 in.) at 7.6 m (25 ft.) extreme spread</td>
<td>9 cm (3.5 in.) at 7.6 m (25 ft.) extreme spread</td>
</tr>
<tr>
<td>Safety template</td>
<td>160 m (523 ft.)</td>
<td>160 m (523 ft.)</td>
</tr>
<tr>
<td>Penetration in 20% gelatine</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Muzzle energy (at 3.5 m)</td>
<td>3.0-5.6 joules (2.2-4.1 foot-pounds)</td>
<td>2.6-5.5 joules (1.9-4.1 foot-pounds)</td>
</tr>
<tr>
<td>Trajectory match</td>
<td>Mean point of impact 15 cm (6 in.) lower than ball at 7.6 m (25 feet)</td>
<td>Mean point of impact 5 cm (2 in.) lower than ball at 7.6 m (25 feet)</td>
</tr>
</tbody>
</table>

TERMINAL EFFECT

<table>
<thead>
<tr>
<th>Effect</th>
<th>9 x 19 mm FX®</th>
<th>.38 / .357 cal. FX®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lethality</td>
<td>Non-lethal bruises, welts or scrapes</td>
<td>Non-lethal bruises, welts or scrapes</td>
</tr>
</tbody>
</table>

USE

<table>
<thead>
<tr>
<th>Type</th>
<th>9 x 19 mm FX®</th>
<th>.38 / .357 cal. FX®</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>For use with Simunition® conversion kit only</td>
<td>For use with Simunition® safety rings or conversion kit only</td>
</tr>
<tr>
<td>Operational temperature range</td>
<td>-8° to 40° C (18° to 104° F)</td>
<td>-8° to 40° C (18° to 104° F)</td>
</tr>
<tr>
<td>Mandatory safety equipment</td>
<td>Head, throat and groin protection</td>
<td>Head, throat and groin protection</td>
</tr>
<tr>
<td>Firing modes</td>
<td>Single shot for pistols; single shot, burst and full automatic for submachine guns</td>
<td>Single shot</td>
</tr>
<tr>
<td>Weapons</td>
<td>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 all available models.</td>
<td>The ammunition will function in most revolvers chambered for .38 Special or .357 Magnum. 12 Gauge conversion kit will function in most pump action shotguns chambered for 2-3/4” and 3” shells.</td>
</tr>
</tbody>
</table>

STORAGE

<table>
<thead>
<tr>
<th>Storage Type</th>
<th>9 x 19 mm FX®</th>
<th>.38 / .357 cal. FX®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended storage</td>
<td>Cool, dry environment, 25° C (77° F) max.</td>
<td>Cool, dry environment, 25° C (77° F) max.</td>
</tr>
<tr>
<td>Shelf life</td>
<td>Five years in original packaging</td>
<td>One year in original packaging</td>
</tr>
<tr>
<td>Warranty</td>
<td>One year</td>
<td>One year</td>
</tr>
</tbody>
</table>

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 and .38 cal. FX® Marking Cartridges 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.

SIMUNITION, Safety as The Standard™

www.simunition.com
www.gd-otscanada.com

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