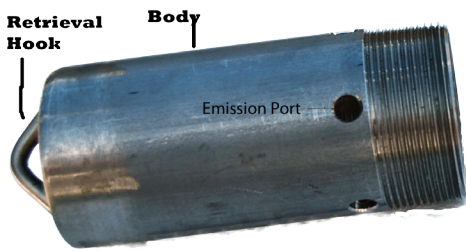


# CMC HandSafe™

## Instructions

The HandSafe™ is a tool used to insert a small amount of pyrotechnic non-lethal chemical agent into an enclosed area diminishing the probability of fire. The HandSafe™ is small enough to be taken into a structure by the

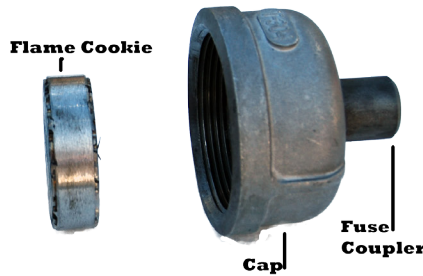


entry team for those times that an interior space needs additional agent. A carry pouch is available for entry teams to carry the HandSafe™.

The HandSafe™ is heavy enough at 2.5 pounds to penetrate some windows for applications from outside a structure. A D-ring attachment is on the base of the HandSafe™ so that if needed 550 cord can be attached for retrieval. The HandSafe™ will accommodate a pocket tactical grenade or similar type non-lethal chemical agent device.

A small “heat and flame diverter cookie” needs to be placed in the HandSafe™ before deployment. The steel cookie catches heat and flame while allowing the agent to be released. The cookie is a onetime

use item because of the extreme heat and sludge build up. If a cookie is reused it will be loaded with expended burnt sludge and will over-heat the aluminum body of the pocket grenade causing it to expand and losing it's tightness over the top round plate that



screws onto fuse coupler. If this happens, the aluminum body will just spin around the top plate and will not have any pressure to remove the top plate from fuse coupler leaving the HandSafe™ useless until the spent pocket grenade is removed.

Because of the heat and sludge build up on the threads that hold a pocket grenade inside the cap the threads must be completely cleaned and lubricated before installing the next canister. If threads are not cleaned and lubed after each use two things can happen:

- The chemical makeup of CS will corrode the fuse coupler and if not cleaned will need to be replaced.
- Failure to clean results in the threads causing the grenade to bind with the threads of the fuse coupler.

If this happens, cut the spent canister as close to the bottom of the cap as possible, then use vice grips to remove the remaining portion of the canister.

**WARNING: DO NOT USE OLDER CTS POCKET GRENADES WITH A PLASTIC FUSE COUPLER. THEY WILL MELT AND CAUSE YOU TO CLEAN THE MELTED PLASTIC BEFORE THE HANDSAFE™ IS REUSED.**

Features include:

- A 10 year warranty on the body and cap
- Body and cap are made with all steel construction
- Replaceable heat and flame diverter cookie
- D-ring attachment for retrieval
- Small enough to carry in cargo pocket or HandSafe™ pouch (optional)



## Loading

Locate a safe and secure area away from bystanders and personnel where you and your safety person can focus your attention on the job at hand. Make sure you are downwind from the majority of personnel and bystanders in the area.

Both the safety person and the operator should wear an approved respirator and safety gloves.

Remove the cap assembly from the HandSafe™. Inspect the tool for rust, cracks or blockages in the emission ports.

Inspect the fuse coupler for rust debris or blockages. Inspect the body of the HandSafe™ for defects, cracks or rust.

Make sure the “heat and flame diverter cookie” of the HandSafe™ is new, clean and unobstructed.

Lubricate all threads of each device before usage (main body and fuse head). We recommend FrogLube. Failure to lube threads can cause galling, rendering unit useless

Place new flame cookie into body of your clean and lubricated HandSafe™.

Use only recommended pyrotechnic devices. Never use a blast type device or a smoke grenade in a HandSafe™.

Unscrew the fuse of an recommended pyrotechnic device keeping the grenade vertical to minimize loss of chemical agent. Turning the grenade upside down

with the fuse removed may result in loss of chemical agent payload and contaminate the area you are working in. Set the grenade body down in a secure area with the fuse opening upright.

Screw the fuse into the cap assembly and hand tighten only.

Keeping both the cap assembly and the grenade body vertical and in an upright position, slowly thread the pocket grenade onto the inside nipple of the cap. Hand tighten the grenade onto the nipple.

### *Recommended Pocket Devices*

#### *Safariland*

1015CN

1016CS

#### *Combined Tactical*

8220

8230

#### *Amtec Less Lethal (ALS)*

ALSG278CS

Guide the attached pocket grenade and cap assembly into the HandSafe™. Hand tighten the cap assembly onto the body of the HandSafe™.

With the HandSafe™ never cut or bend the safety spoon. You will need to have it to hold the safety spoon down after the safety pin is pulled while moving with the device.

Depending on the manufacturer, prep the pin by either rotating or straightening out the cotter pin, just prior to deployment of the device.

Attach a carabiner and lanyard to the D-ring attachment point if required.

## Deployment

Have a predetermined approach and retreat plan to and from the target using cover and concealment. Have a predetermined primary and secondary breach point.

For the HandSafe™, look to see where the device will land. Avoid deploying it on combustible material if possible. Have a retrieval line attached to the D ring attachment point if necessary.

For the HandSafe™, remove the pin and observe the spoon fly off. Make sure that the device has ignited before deploying it in the predetermined area.

Determine if any combustible or flammable materials are present as in a drug lab. Is the natural gas turned off? Has the suspect created a combustible environment by pouring out flammable liquid, or turned on natural or propane gas? If so reevaluate your tactics to compensate for the increased danger.



## Safety Considerations

Only personnel who have been trained in a state approved non-lethal chemical agent's course, a manufacturer's non-lethal chemical agent's course and in the proper use of the HandSafe™ should be involved in loading, unloading, deployment and maintenance of the "HandSafe™".

Do not deploy excessive amounts of non-lethal chemical agents into confined spaces. Pyrotechnic devices can create high levels of toxic smoke if not used properly.

Once the HandSafe™ has been used, it will be contaminated with chemical agent residue. Only trained personnel wearing an approved gas mask and protective gloves should handle the expended device.

Never store the HandSafe™ with a live chemical agent device inside.

Due to the cross contamination potential of the HandSafe™ after use, the person transporting the contaminated tool and used device(s) should use a sealed container to transport. Only trained personnel should transport the tool and device(s) to a safe and secure area for decontamination and/or disposal.

Under no circumstances should the HandSafe™ be used in situations where a suspected flammable or combustible atmosphere exists. Questions regarding the combustibility of various flammable atmospheres should be directed to local fire department personnel before deploying with any of CMC manufactured tools.

The best method for deploying the HandSafe™ is to conduct an accurate target analysis of the structure for effective and safe deployment. If you cannot determine where the HandSafe™ will land then you must consider the consequences for potential injury or fire.



Never load any type of smoke grenade into the HandSafe™. Smoke grenades generally emit a far larger amount of smoke at a higher heat than pyrotechnic non-lethal chemical agents. Because of this smoke grenades may exceed the safety limits of the tool.

Use only recommended pyrotechnic non-lethal chemical devices. If in doubt contact the manufacturer before using. The payload or charge in pyrotechnic chemical agent devices varies from year to year. Verify the charge from the Material Safety Data Sheet (MSDS) sent with the devices.

## Maintenance

The HandSafe™ has a limited ten (10) year warranty. After ten years the tool should be removed from service. Each tool is serialized to assist in maintaining records.

All CMC products need to be kept in a clean and ready to use state. As the threads on the HandSafe™ get hot they will become very hard to turn unless they have been treated with a lubricant that will stand up to the generated heat, like an anti-seizing compound.

We have shipped FrogLube with your device and recommend that the device be treated regularly with the product.

High temperature, corrosion and the amount of pyrotechnic devices used in the HandSafe™ will affect the useful life expectancy of the tool, especially if it is not cleaned immediately after each deployment.

After using the HandSafe™, when the device is still warm, not hot, is a good time to apply FrogLube into the threads as the heat will accelerate the absorption into the voids of the metal. If you treat your devices while they are still warm, use proper protection consisting of a respirator and heat resistant gloves. The threads of both the chamber and fuse of the HandSafe™ should be clean and well lubricated before and after deployment.

After treatment, you should notice a marked reduction in friction. It is not necessary to do this after every use, but should be done before storing and at regular intervals. You should ensure that the excess FrogLube is removed by wiping with a clean cloth.

The HandSafe™ should be cleaned with a high pressure, high temperature automotive steam cleaner utilizing a soap mixture.

The recommended temperature for the steam cleaner is 220 degrees Fahrenheit.

If this isn't available you can use an automobile degreasing liquid.

All traces of contaminants must be removed. The sooner the HandSafe™ is cleaned, the better it will minimize the possibility of corrosion and rust.

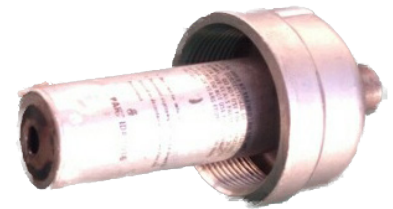


The HandSafe™ should be thoroughly dried before storage and covered with a thin film of FrogLube™ or another rust preventative lubricant. The threads should be coated with FrogLube™ or another protective coating of anti-seize lubricant.

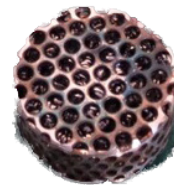
It is necessary to periodically inspect the HandSafe™ to maintain operational readiness. It is recommended that trained personnel inspect the device on a monthly basis. A record of inspection should be kept.



HandSafe™ Body  
FrogLube™ threads



Pocket Tactical Grenade  
screw into Cap



Expended Heat Cookie  
Do Not Reuse

## Training

All users of CMC products must be trained before use. The California Tactical Officer's Association offers a class for chemical agent instructors that teaches officers how to use CMC products. An on-line class is offered at [www.CAinstructor.com](http://www.CAinstructor.com). Training classes on CMC products can be arranged for your agency by calling (760) 845-8062.

### Disclaimer

The manufacturer does not and will not accept any liability, either expressed or implied, for results of damage, injury or death arising from or alleged to have arisen from the use of the HandSafe™. The user assumes all liability for damage, injury or death arising from the use of the HandSafe™. The use of the HandSafe™ and requires that the user have specific training and education in the use of Non-lethal chemical agents. The user is specifically warned to monitor lethal concentration times. LCT<sup>50</sup> must be calculated and monitored in enclosed environments to avoid injury or death by minimizing time of exposure. Further it is clearly stated that the introduction of a pyrotechnic device into a situation where such a device would not previously have been used raises the likelihood that fire, injury and death could occur due to its use. The HandSafe™ is intended to reduce the exit temperature of pyrotechnic non-lethal chemical agent and therefore reduce the chance of fire. The manufacturer has no control over the circumstances encountered in the deployment of any device.

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