

FIRESTARTING NOTES

Through personal experience, we have selected and carried emergency items in our packs and vehicles of our own personal preference we would trust in an emergency. Feedback from my past students/instructors indicated everyone could easily start a fire in a fireplace or campfire. However, in an urgent, unplanned outdoor situation in difficult conditions, those techniques are very likely to be ineffective. The intention of this document is to cover what I consider is/isn't an all-weather, all-condition and **most importantly: a reliable** "fire-starting" material/technique. Many of the fire-starters items are listed on this document are available from sporting goods and surplus stores, as well as on-line sources such as Amazon®.

Realize the advantages/disadvantages of all items in the conditions they are likely to be depended on. Remember the urgency of starting a fire for warmth, signaling or heating liquids for hypothermia issues will likely occur in darkness/wind/rain/snow. If hands are shivering or an individual is also dealing with panic from being lost, sick or an injury to themselves or in group, this will compound the difficulty of every single survival task. Obviously, there is no perfect fire-starting material usable in every situation, so please familiarize yourself to as many available options as possible. The goal is for you get to know **all** of your emergency equipment and techniques before you need them (hopefully you never will).

A few favorite and/or popular ones are as follows:

TRIOXANE FUEL TABLET (Metaformaldehyde) A military surplus item in green foil packet with printed instructions. If foil package remains sealed, it has a near-infinite shelf life. This is essentially a solid organic tablet that burns very hot with a blue flame like natural gas or propane. Difficult to see the flame in daylight. Tab may be broken up and the pieces used or the entire tablet placed under tinder. Can also be partially unwrapped, used to ignite tinder, flame blown out, cooled and foil re-wrapped over tablet for later reuse and temporary storage. Once package opened, humidity will greatly shorten the useful life. These are available in two tablet sizes that will burn for either 5 or 15 minutes. A similar military item replacing Trioxane now is called **Pyropac** (Diethylene Glycol) a newer *gelled* version that is non-toxic, odorless and water soluble. Even though this is also a very effective fire-starting product, it is less desirable and durable for packing, due to the risk of its package being punctured and the gel leaking out into your pack. Neither item has been described as 'Hazmat' and currently is mailed/shipped by on-line vendors selling it. However, it is reported airlines will forbid your transporting it.

WETFIRE® ALL WEATHER TINDER Use instructions printed on wrapper. Each cube burns up to 5 minutes. Manufacturer advises shelf life is "5 years" which may be a problem since neither box or wrapper lists a date code. You will not know how long seller had it after its manufacture date.

FIRE STICKS Nearly identical products sold under several different names. Sold as a fire starter, but more of a waterproof "fire-accelerator" or tinder material. The stick's edges need to be frayed with a knife to initiate and sustain ignition with a match or lighter.

FIRE RIBBON or FIRE PASTE An effective gelled Firestarter packaged in a foil tube, similar to toothpaste. The size container may be a little large/heavy for inclusion in your backpack. Due to the same risk of the container being punctured (as with Pyropac, listed above) it is not a favorite. It appears after the container is partially used, the remaining contents tend to harden over time and difficult to squeeze out and less flammable, even with cap securely replaced.

Over>>>>

Factors you should consider for your emergency fire starting supplies are:

- **Shelf life**, if you need to deploy an item in an emergency, will it still work months or years after you packed it in your survival gear?
- **Reliability**, can you count on it working the first time and every time you may need it?
- **Physical size**, is it adding unreasonable weight or bulk to your pack that may tempt you to leave it behind?
- **Safety and Ease of use**, are there any issues using it that may cause injury? For example, the “Metal Match” fire-starter requires you to initially shave magnesium off a small block with a knife before igniting it, then using the knife against the flint ignitor, also attached to that block. If you are panicky, scared, your hands are shivering and becoming numb from the cold or in darkness, you will risk cutting yourself, compounding your emergency. Also, most pyrotechnics used as fire starters have safety risks to the user.
- **Effectiveness**, will the item generate enough heat to ignite damp tinder in wind/rain/snow conditions? This also would not be the time to discover the limitations of a survival item or try to read the instructions on how an item works that you’ve never used.

The following is a list of many (but not all) available “*fire ignition sources*”, “*fire-starters*” and “*fire accelerators*” (tinder) usable in an outdoor emergency. This list is provided only as an example of numerous possible options. Some items listed were never intended to be an outdoor fire-starter, but thru improvising, they can be used with a wide range of effectiveness. Also, some items are marketed as an “emergency or survival fire-starter”, but have proven ineffective, undependable and not worthy of trusting your life with in an emergency. It is recommended they also have a backup and a duplicate item in case your primary one fails or becomes misplaced.

Revised: 5 Feb 2022 Lindner

- Fire Ribbon & Fire Paste
- Surefire
- Hotcakes
- Ultra Lite
- Strike Force Cubes & Tinder
- Optimus Fire Lighter
- Coleman Fire Starter Sticks
- Coghlan's & Safesport Fire Sticks
- Supermatch Fire Starters
- Firebrand Firestarting Pellets
- NP3, M2 Firestarter (military)
- Hexamine tablets
- Trioxane tablets & bars
- FLAME matchless fire kit
- Spark-Lite aviation survival Firestarter
- BCB Adventure, Matchless Fire Kit
- VEB Pyrotechnik, marine flare
- Uninta gel
- Fire-Up
- Camps Fire Solid Lighter
- EcoLite
- Cotton balls & Vaseline
- Vehicle fuel
- Metal Match & Blast Match
- Lightning Nugget
- Steel Wool (0000 size)
- Coghlan's Emergency Tinder
- Highway Fusee (road flare)
- Fire Tabs
- Alcohol in a compass
- Flamglo and Weber lighter cubes
- Esbit Fuel Tabs
- Alco-Brite, jelled alcohol
- Lint (from clothes dryer)
- Potassium Permanganate & Glycerin
- Lifeboat Matches (various brands)
- Bow & drill
- Stormproof & waterproof matches
- Lighters
- Calcium Carbide
- Lightnin' Bug
- Raton Rocket
- Greenheat FireStarter
- Firemuffin
- Potato Chips (oily ones will burn)
- And many others....