



Fire Debris/Ignitable Liquid Evidence Submission Guidelines

Fire Debris

Vapor proof packaging is required and acceptable packaging includes:

- **Paint cans** (not quite vapor proof but acceptable): lined or unlined with tape seal across lid so tape is on two sides of can (one strip of tape on one side only is a hinge). Some cans have a rubber septum in the middle of the lid. Either tape over the septum or seal in a plastic bag, as that septum is a possible route of access into the can. Ideal is one can sealed into a vapor bag with room to reseal the vapor bag at least twice.
- **Arson vapor bags** (vapor proof, manufactured in a manner that ignitable liquids are not used or detectable on the material). Best for soft items or odd shaped since the plastic can easily crack.

Vendors for arson bags are:

Ampac Flexibles, 5305 Parkdale Dr, Minneapolis, MN 55416; Phone: 800-527-2557 x2430
(polyester rollstock, tubular, one size)

Grand River Products - 444 Lexington Road, Grosse Pointe Farms, MI 48236; phone: 313-881-7861 (nylon bags)

- **Other vapor bags** (non-arson such as Lynn Peavey) are okay, but an empty one for analysis and comparison is best to have since they typically will show some ignitable liquid pattern.
- **Canning jars**. Not great, but acceptable. Best is to reseal these into arson bags when submitted, as the lids on these do not seal very well.
- **If you can smell something coming from the package it is not vapor proof, and it can contaminate other items. Seal it by itself inside a vapor bag.**
- Best not to combine cans in a joint plastic bag or vapor bag, as they can contaminate each other. Seal them individually in vapor bags for transport to Denver.

Liquids

- Multiple layers are necessary: best is to have the liquid in a glass vial with Teflon lined cap inside a plastic bottle inside a vapor bag (arson type not necessary). If the vial leaks there are two more barriers to keep it from leaking out.
- Containers which have or did have a suspected ignitable liquid (such as a gas jug): Multiple layers of vapor proof bags (heat sealed in a vapor bag, then heat sealed inside another vapor bag)
- **Keep these separate from the evidence items. Never, ever seal a suspected ignitable liquid inside the same package with debris or clothing from a suspect.**

Clothing

- MUST be in vapor proof bag, best is one specifically for arson evidence.
- If the submitted evidence is in paper, put it in a vapor bag ONLY IF it has only been a few days since the fire, or if you smell something petroleum-like. If it is in paper, contamination as well as loss of ignitable liquids has already been possible, and my time spent would be a bit of a waste. I will report it as not analyzed due to improper packaging.
- Keep separate from other evidence items. Don't seal inside a plastic bag with the paint cans and gas jug also submitted.

Freeze/Refrigerate

- ANY soil samples. Some bacteria in soil can eat some of the compounds in petroleum products.
- Any evidence except liquid samples can be frozen, and is actually the best practice. So if you have room, freeze.

Please do NOT submit:

Plastic bags (general plastic, like regular evidence bags, the adhesive closed bags, ziplocks, garbage bags)

Paper bags or envelopes

Cardboard boxes

Coffee cans

Pepper Spray/Tear Gas/Bank dye stains:

Like fire debris evidence, it must be in vapor proof packaging. Arson bags or paint cans, NOT plastic or paper.

Keep items packaged completely separate from other items; especially keep any standards (such as spray canisters or cartridges) separate from unknowns.