

Centre of Forensic Sciences Fire Debris Packaging Guide

Type of Sample	***Required***	Recommended
<p>Fire Debris</p>  <p>Security-sealed Mason jar</p>	<p>Use Glass Mason jars with metal cap and ring, except for larger items and liquid samples (see below).</p> <p>If alcohols, solvents or lacquer thinners are suspected, it is recommended that only glass Mason jars are used.</p>	<ul style="list-style-type: none"> - Leave air space for sampling (approx. ¾ full) - Ensure the mouth of jar is clean of debris, and that the metal ring and lid are tightly sealed - Apply numbered, tamper-proof security seal to jar - Place protective netting over jar - Seal jar in a nylon bag if the item has a noticeable petroleum odour - Submit an empty jar for comparison purposes
<p>Large Items (Any items that cannot fit into a 1L Mason jar)</p>  <p>Swan neck seal</p>	<p>Use only specialty nylon bags</p> <p>Garbage bags, paper bags, Ziploc bags, & standard police evidence bags are not suitable for retaining ignitable liquid vapours. Items packaged in these types of bags will not be accepted for analysis.</p> <p>If alcohols, solvents or lacquer thinners are suspected, it is recommended that only glass Mason jars are used.</p>	<ul style="list-style-type: none"> - Leave air space in bag to allow for sampling - Seal the bag using one of the following methods: <ol style="list-style-type: none"> 1. “Swan neck” seal: twist neck of bag, fold over and secure with cable-tie or tape. Seal the opening of nylon bag with duct tape. 2. Fold the opening of the bag over on itself at least three times and seal with duct tape. - Double bag the item if it is heavy, very wet, has sharp edges or has a strong petroleum odour - Nylon bags should not be sealed with adhesive tape that has printed lettering (eg “OFM” tape) - Items in bags should be small enough to fit into a conventional microwave
<p>Liquids</p>	<p>Liquids must be received upright with no visible signs of leakage. Ensure that lids are closed tightly.</p>	<ul style="list-style-type: none"> - Use Glass vials (20mL) with a foil lined lid - Ship liquid items separately from other items - If a Mason jar must be used to package a liquid, submit no more than 50mL (~1/4 cup), and seal the jar in a nylon bag to prevent leakage
<p>Soil / Vegetation / Food</p>	<p>Refrigerate as soon as possible to reduce the possibility of bacterial action.</p>	
<p>Lung and Biological Tissue</p>	<p>Use only glass Mason jars with a metal cap and ring.</p> <ul style="list-style-type: none"> - Jars must not be more than ¾ full - All lung submissions must have an analysis request for either <u>ignitable liquids</u> and/or <u>hydrocarbon gases</u> (such as natural gas and propane) 	<p>- Submit an empty jar for comparison purposes</p>
<p>Clothing</p>	<p>Suspect or victim clothing should be packaged in glass Mason jars or specialty nylon bags.</p> <p>Suspect clothing should be stored and shipped in separate boxes from items recovered at the scene, including any items associated with a victim.</p>	<p>Suspect clothing should be packaged within 24 hours of the occurrence. If clothing was packaged after 24 hours, contact a fire debris analyst to discuss suitability for examination.</p> <p>Victim clothing with biological fluid or tissue should be refrigerated if possible.</p>

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Comparison Samples:

Whenever possible, an unburnt/unused comparison sample of debris (e.g. unburnt carpet sample, wood, etc.), or of a substrate used to collect a liquid (e.g. a paper towel wipe), should also be submitted for analysis. This will help to account for contributions made to the analytical results by the debris and substrate materials.

Packaging - Supplier Information

Mason Jars	Any retail kitchen or hardware store (1L size recommended)	Please Note: - prior to use, jars should be cleaned by rinsing with hot water (no soap) and placed upside down to dry away from potential sources of ignitable liquid vapour - clean jars should be stored with their lids on until they are used
Specialty Nylon Bags Standard size Grand River bags are 12" x 18".	Latent Forensic Services Burlington, ON 289-684-2973 dave.broughton@latentforensics.com https://www.latentforensics.com/product/nylon-arson-bags-3/	Crime Sciences Inc. Fonthill, ON 1-905-892-1800 or 1-866-803-5133 www.crimesciences.com Item Code: LP-05115
	Grand River Products Grosse Pointe Farms, MI 1-313-881-7861	Note: Specialty nylon bags tend to be crinkly & thicker than typical plastic bags.
Glass Vials:	Fisher Scientific Ottawa, ON 1-800- 234-7437 www.fishersci.ca Kimble 20mL glass scintillation vials with foil-lined lids; Product #: 03-337-5	Note: Other types of glass vials may be used provided that they have foil-lined lid inserts.
Protective netting:	Cole-Parmer Montreal, PQ 1-800-363-5900 www.coleparmer.ca Poly-Net 2" to 4" diameter; Catalog #: OF-09405-30	

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