

# HAZARDOUS CHEMICAL WASTE CHECKLIST

TYPE OF WASTE AND DESCRIPTION	PACKAGING AND LABELLING REQUIREMENTS
<p><b>Halogenated Solvent Waste:</b> Organic waste that contains a halogen (Fluorine, Chlorine, Bromine or Iodine).</p> <p>Examples include:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Chloroform</li> <li><input checked="" type="checkbox"/> Dichlorofluoromethane</li> <li><input checked="" type="checkbox"/> Ethylene dibromide</li> <li><input checked="" type="checkbox"/> Methyl Iodide</li> </ul> <p><input checked="" type="checkbox"/> NO PFAs or similar poly halogenated waste</p> <p><input checked="" type="checkbox"/> NO lachrymatory compounds</p>	
<p><b>Non-Halogenated Solvent Waste:</b> Organic waste that does <b>NOT</b> contain halogens.</p> <p>Examples include:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Acetone</li> <li><input checked="" type="checkbox"/> Alcohols (methanol, etc.)</li> <li><input checked="" type="checkbox"/> Hexanes</li> <li><input checked="" type="checkbox"/> Toluene</li> </ul> <p>Disposed of via incineration with energy recovery</p>	
<p><b>Glass Waste:</b> this is glass that cannot be recycled; non-recyclable glass solvent bottles, borosilicate glass, broken glass, ceramic-ware, glass chromatography plates, microscope slides, pipettes, empty vials, test tubes, thermometers (no mercury present).</p> <p>Empty glass chemical containers must be rinsed with either water or solvent prior to disposal in glass bins.</p> <p>This waste may be contaminated with very low levels of chemicals and HG1 biological material considered to be harmless due to hazard classification or low concentration/dose.</p> <p><input checked="" type="checkbox"/> <b>ONLY GLASS</b> to be placed in these bins.</p> <p><input checked="" type="checkbox"/> NO tissues, gloves, lids or any soft consumables</p> <p><input checked="" type="checkbox"/> NO chemical material</p> <p>in particular the following should never be placed in these bins: air or water sensitive compounds or containers, highly toxic chemicals or heavy metals.</p>	<p>Packaged in 60 litre yellow plastic containers (burn bins) labelled as Glass Waste. These are disposed of via incineration. This is <b>NOT</b> clinical or infectious waste and should not be labelled as such.</p> 

<p><b>Solid Waste containing/contaminated with Toxic Material</b></p> <p>Common chemical waste materials include:</p> <ul style="list-style-type: none"> <li>• Ethidium Bromide</li> <li>• Lead</li> <li>• Arsenic</li> </ul> <p>These should be segregated by chemical and <b>NEVER</b> mixed unless approved by Hazardous Waste Manager.</p> <p>Mercury should not be put in these containers and should be disposed of separately.</p>	<p>Packaged in 30 or 60 litre yellow plastic containers (burn bins) labelled as Toxic Waste (labels obtained from hazardous waste service)- these are disposed of via incineration.</p> <p>This will include any lab consumables contaminated with toxic materials above threshold concentrations.</p>
<p><b>Ampoule/Sample Vial Waste:</b></p> <p>Glass ampoules/sample vials containing liquids (usually flammable solvents) that have been sealed and so contents cannot always be emptied, e.g., HPLC vials.</p> <p>These bins are not leak proof and so vials with removable lids containing liquids should not be placed in these bins.</p> <p>Also, solid samples in ampoules/vials that cannot be disposed of as non-hazardous waste (lids can be removable for solids).</p> <p>Segregated into solid and liquid samples (must not be mixed) and with maximum of 2 L liquid (combined volume for all sample vials) per 30L yellow plastic container.</p>	<p>Packaged in 30 or 60 litre yellow plastic containers (burn bins) labelled either as Sealed Ampoules (liquid) or Sample Vials (solid)</p> <p>These are disposed of via incineration.</p> 
<p><b>Waste containing dusts/particulate:</b> Common waste materials include:</p> <ul style="list-style-type: none"> <li>• Silica</li> <li>• TLC Plates (silica on aluminium backing - no glass)</li> <li>• Solid nanomaterial waste, e.g. carbon nanotubes</li> <li>• Resins</li> <li>• Drying agents</li> </ul> <p>These materials must be segregated into chemical and type of waste, they cannot be mixed, i.e. silica from chromatography cannot be mixed with silica TLC plates.</p>	<p>This waste should be double bagged or placed in a plastic container and then placed into a lidded blue drum (or similar container). This is to prevent escape during collection/transit.</p> <p>The drum and/or Individual packaging must be correctly labelled with the contents as per Code of Practice.</p> 
<p><b>General Laboratory Chemicals (“lab smalls”)</b></p> <p>Expired, unwanted chemicals which are usually in their original containers, e.g., glass bottles.</p>	<p>A comprehensive inventory of each of the waste chemicals must be supplied with the waste. Without this it will not be accepted by waste companies for onward transportation and disposal.</p> <p>Solid and liquid waste must be segregated, as well as incompatible chemicals.</p>

They should be packaged in an appropriate container to comply with the Hazardous Waste Regulations; to prevent breakage and escape. A plastic container/box is required with a lid (pictures below are an indication of the type of box/crate that could be used).

Containers of liquids must be packed with an absorbent material such as vermiculite.

Containers must be packed in a single layer with all upright. There must be no stacking or putting containers on their side to prevent breakage and leaks.

The lid must fit properly for transport.



**Waste oils (non-edible or contaminated edible)**

Waste oil/fuel from vehicles/research, mainly mineral oil

Different types of oil must be segregated, no mixing is allowed.

Can also be edible oils contaminated with chemicals.

Contained in (original) metal drums/plastic containers depending on volume. Or in plastic bottles such as 2.5L chemical bottles reused for this purpose.

This is recycled whenever possible.