

## EPA Hazardous Waste Characteristics

<https://www.epa.gov/hw/defining-hazardous-waste-listed-characteristic-and-mixed-radiological-wastes#character>

<b>EPA Waste Characteristic</b>	<b>Hazardous Waste Parameters</b>	<b>Notes</b>
Ignitability	<ol style="list-style-type: none"> <li>1. the waste is a non-aqueous liquid with &gt;24% alcohol by volume and has a flash point &lt;140°F.</li> <li>2. the waste is a pyrophoric, water reactive or explosive material.</li> <li>3. the waste is an ignitable compressed gas</li> <li>4. the waste is an oxidizer such as chlorates, permanganates, nitrates, and inorganic or organic peroxides.</li> </ol>	<p>All waste containing ignitable liquids should be handled as ignitable waste, regardless of concentration or flash point, with the ignitable hazard classification marked on the orange Chemical/Hazardous Waste label.</p> <p>If you believe your waste containing ignitable constituents may not meet the EPA definition of ignitable hazardous waste contact EH&amp;S at <a href="mailto:hazmat@columbia.edu">hazmat@columbia.edu</a> for assistance in making a hazardous waste determination.</p>
Corrosivity	<ol style="list-style-type: none"> <li>1. the waste is a liquid or aqueous solution that has a pH of &lt;2 or &gt;12.5</li> </ol>	<p>If the waste pH is greater than 2.0 or less than 12.5, the waste is not corrosive per EPA, however should be collected for disposal by EH&amp;S as non-hazardous waste because NYCDEP sewer rules prevent corrosive liquids from entering the sewer system. Corrosive waste that is NOT EPA hazardous waste should be marked as "Non-Hazardous" and the measured pH should be noted on the orange Chemical/Hazardous Waste label by the lab.</p>
Reactivity	<ol style="list-style-type: none"> <li>1. unstable items, explosives, reacts violently with air or when mixed with water resulting in an explosion or generation of toxic gases, is a cyanide or sulfide generating waste when exposed to pH conditions between 2 and 12.5</li> </ol>	
Toxicity	<ol style="list-style-type: none"> <li>1. includes 8 heavy metals, several pesticides and specific Volatile Organic Compounds (VOCs)</li> </ol>	<p>If the waste contains any of the following 8 metals, EPA established specific concentrations that are considered hazardous. Contact EH&amp;S at <a href="mailto:hazmat@columbia.edu">hazmat@columbia.edu</a> for assistance in making a hazardous waste determination.</p> <ol style="list-style-type: none"> <li>1. Arsenic (As)</li> <li>2. Barium (Ba)</li> <li>3. Cadmium (Cd)</li> <li>4. Chromium (Cr)</li> <li>5. Lead (Pb)</li> <li>6. Mercury (Hg)</li> <li>7. Selenium (Se)</li> <li>8. Silver (Ag)</li> </ol>
Listed hazardous waste	<ol style="list-style-type: none"> <li>1. F listed waste from non-specific sources</li> <li>2. U and P listed waste which are toxic or acutely toxic</li> <li>3. Polychlorinated biphenyls (specifically listed NY State hazardous waste</li> </ol>	<p>The F-list includes many common spent halogenated and non-halogenated solvents used in research labs. All halogenated and non-halogenated solvents must be collected as hazardous waste.</p> <p>EPA has an extensive list of U- and P-listed chemicals. For common examples see the <a href="#">hazardous waste determination webpage</a>. If you are still unsure, refer to the GHS pictogram and/or SDS and if the toxic pictogram is shown, select "toxic" on the orange Chemical/Hazardous Waste label or contact EH&amp;S at <a href="mailto:hazmat@columbia.edu">hazmat@columbia.edu</a> for assistance in making a hazardous waste determination.</p>