### EPA Hazardous Waste Characteristics

**EPA Waste Characteristic** | **Hazardous Waste Parameters** | **Notes**
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**Ignitability**  
1. the waste is a non-aqueous liquid with >24% alcohol by volume and has a flash point <140°F.  
2. the waste is a pyrophoric, water reactive or explosive material.  
3. the waste is an ignitable compressed gas  
4. the waste is an oxidizer such as chlorates, permanganates, nitrates, and inorganic or organic peroxides.  | 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.  
If you believe your waste containing ignitable constituents may not meet the EPA definition of ignitable hazardous waste contact EH&S at hazmat@columbia.edu for assistance in making a hazardous waste determination.  |

**Corrosivity**  
1. the waste is a liquid or aqueous solution that has a pH of <2 or >12.5  | 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&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.  |

**Reactivity**  
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  |  |

**Toxicity**  
1. includes 8 heavy metals, several pesticides and specific Volatile Organic Compounds (VOCs)  | If the waste contains any of the following 8 metals, EPA established specific concentrations that are considered hazardous. Contact EH&S at hazmat@columbia.edu for assistance in making a hazardous waste determination.  
1. Arsenic (As)  
2. Barium (Ba)  
3. Cadmium (Cd)  
4. Chromium (Cr)  
5. Lead (Pb)  
6. Mercury (Hg)  
7. Selenium (Se)  
8. Silver (Ag)  |

**Listed hazardous waste**  
1. F listed waste from non-specific sources  
2. U and P listed waste which are toxic or acutely toxic  
3. Polychlorinated biphenyls (specifically listed NY State hazardous waste)  | 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.  
EPA has an extensive list of U- and P-listed chemicals. For common examples see the hazardous waste determination webpage. 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&S at hazmat@columbia.edu for assistance in making a hazardous waste determination.  |