

# CHEMICAL WASTE MANAGEMENT: COMBINING COMPATIBLE USED ORGANIC SOLVENTS

Date: 08/22/2025 C Price/HMEO

DEHS Contact Information: (502) 852-6670 or [chematix@louisville.edu](mailto:chematix@louisville.edu)



## Information for All Chemical Waste Collection Containers:

- When the first drop of waste is added to the waste container, **it must be labeled with the words Hazardous Waste, chemical content(s), and hazard(s) of the waste.**
- Must be kept closed, unless actively adding waste to the container.
- Must be kept at or near the process of generating the waste (i.e. *same room the waste is generated*).
- Lab cannot exceed 50 gallons of accumulated chemical hazardous waste at any time.
- Lab personnel must submit chemical waste pick up request to DEHS via **Chematix**.
- For further information about UofL Waste Management, visit <https://louisville.edu/dehs/waste-disposal>.

Used organic-chemical containing solvents are considered regulated hazardous waste due to its ignitability (flash point  $\leq 140^{\circ}\text{F}$  ( $60^{\circ}\text{C}$ ) and/or toxicity. Regulated hazardous waste cannot be sink disposed.

## Common Non-Halogenated Organic Solvents that are Compatible to Combine

Most common non-halogenated organic solvents used in biomedical research can be safely combined. This list is not exhaustive, contact DEHS if organic solvent is not listed.

Chemical Name	Chemical Name	Chemical Name
Acetic acid	Ethyl alcohol	Methyl ethyl ketone
Acetone	2-Ethoxyethanol	Methyl isobutyl ketone
Acetonitrile	Ethyl acetate	Petroleum ether
n-Butyl alcohol (butanol)	10% Formalin solution (acceptable in small amounts)	4% Paraformaldehyde solution (acceptable in small amounts)
Cyclohexane	Hexanes	2-Propanol
Cyclohexanone	Isopropanol	Toluene
Dimethyl sulfoxide (DMSO)	Methanol	Xylenes
Limonene	Ethyl Ether	Petroleum ether

If waste organic solvent contains stains or dyes -such as Congo red, crystal violet, Coomassie blue, hematoxylin, methylene blue, safranin, etc. these are acceptable to combine as well.

Laboratories or other areas generating more than 2.5 gallons (10 liters) of spent non-halogenated organic solvent waste per month can request (free of charge) a 2.5-gal carboy from DEHS.

## Common Halogenated Organic Solvents that are Compatible to Combine

Due to impending EPA regulation regarding exposure monitoring for workers that will dispose of halogenated organic solvent waste, please contact DEHS for review. Most halogenated organic solvents are compatible with non-halogenated solvents. However, generators of organic solvents should keep non-halogenated waste solvents separated from halogenated waste solvents when possible.

## Incompatible Waste that can't be Combined into Organic Solvent Waste

Examples of chemicals that cannot be combined: Inorganic acids such as bromine, nitric acid, hydrochloric acid, sulfuric acid, phosphoric acid, perchloric acid, HF, etc. Oxidizers, such as -nitrate, -chlorate, --perchlorate, -permanganate, -nitrite, hydrogen peroxide, et al.