

The segregation table of experimental liquid waste

Common cautions

- Accumulate Experimental liquid waste, Primary and Secondary washings.
- A liquid waste can be stored until 80 percent of the container.
- After judging division by contents and pH value, sort liquid waste into corresponded division.
- Don't leave liquid waste in laboratory while accumulating, carry a little out on a carrying out days. ( Carry out liquid waste accumulated at least once a half year. )
- Don't mix liquids waste among the different divisions.
- Record chemicals which liquid waste includes, pH value and weight on carry-out forms.

Hazardous substances in Waste Management and Public Cleansing Act

Alkylmercury compounds, Mercury and its compounds, Cadmium and its compounds, Lead and its compounds, Organic phosphorous compound, Hexavalent chromium, Aresevic and its compounds, Cyanide, PCB, Trichloroethylene, Tetrachloroethylene, Dichloromethane, Tetrachloromethane, 1,2-dichloroethane, 1,1-dichloroethylene, cis-1,2-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,3-dichloropropene, Thiuram, Simazine, Thiobencarb, Benzene, Selenium and its compounds, 1,4-dioxane, Dioxin kinds.

2020/6 Form a committee

Kinds	Number of container	Divisions / Object of chemicals or pH value	Cautions
Inorganic liquid waste	① シアン(CN)	1. Cyanide Carry-out form of "HAZARDOUS SUBSTANCES" HCN, KCN, Sodium nitroprusside dihydrate, etc.	<ul style="list-style-type: none"> <li>• Make the liquid waste alkaline, pH 12 or above by adding either NaOH, or KOH, and charge into the plastic containers. ( Operate in a fume hood. Never make the liquid waste acid or neutral. )</li> <li>• The same treatment should be applied to the liquid waste containing any metals.</li> </ul>
	② 硫化物(S)	2. Sulfide Carry-out form of "HAZARDOUS SUBSTANCES" H <sub>2</sub> S, Na <sub>2</sub> S, K <sub>2</sub> S, CdS, ZnS, etc.	
	③ 水銀(Hg)	3. Mercurial compound Carry-out form of "HAZARDOUS SUBSTANCES" HgSO <sub>4</sub> , CH <sub>3</sub> -Hg, etc.	
	④ 他 有害物	4. Other hazardous substances Carry-out form of "HAZARDOUS SUBSTANCES" Cd, Pb, Organic phosphorous compound, Cr <sup>6+</sup> , As, Se	
	⑤ 強アルカリ性	5. Strong alkali Carry-out form of "ALKALINE, ACID" Alkali over pH 12.5	<ul style="list-style-type: none"> <li>• Record any chemicals other than Hg in the container on carry-out form.</li> <li>• Don't take mercury of products including mercury by force.</li> </ul>
	⑥ 強酸性	6. Strong acid Carry-out form of "ALKALINE, ACID" Acid under pH2.0	
	⑦ アルカリ性	7. Alkali Carry-out form of "ALKALINE, ACID" Alkali of pH 7.1 ~ 12.4	
	⑧ 酸性	8. Acid Carry-out form of "ALKALINE, ACID" Acid of pH 2.1 ~ 7.0	
Organic liquid waste	⑩ 有機ハロゲン化合物	10. hazardous substances Carry-out form of "WASTE OIL" Dichloromethane, Chloroform, Benzene, 1,4-dioxane, etc.	<ul style="list-style-type: none"> <li>• Record any chemicals in the container on carry-out form.</li> <li>• While accumulating organic liquid waste, Be careful about handing of fire in the neighborhood.</li> </ul>
	⑪ その他 有機	11. Waste oil except number 10 Carry-out form of "WASTE OIL" n-Hexane, Acetone, Formalin, Mineral oil, etc.	

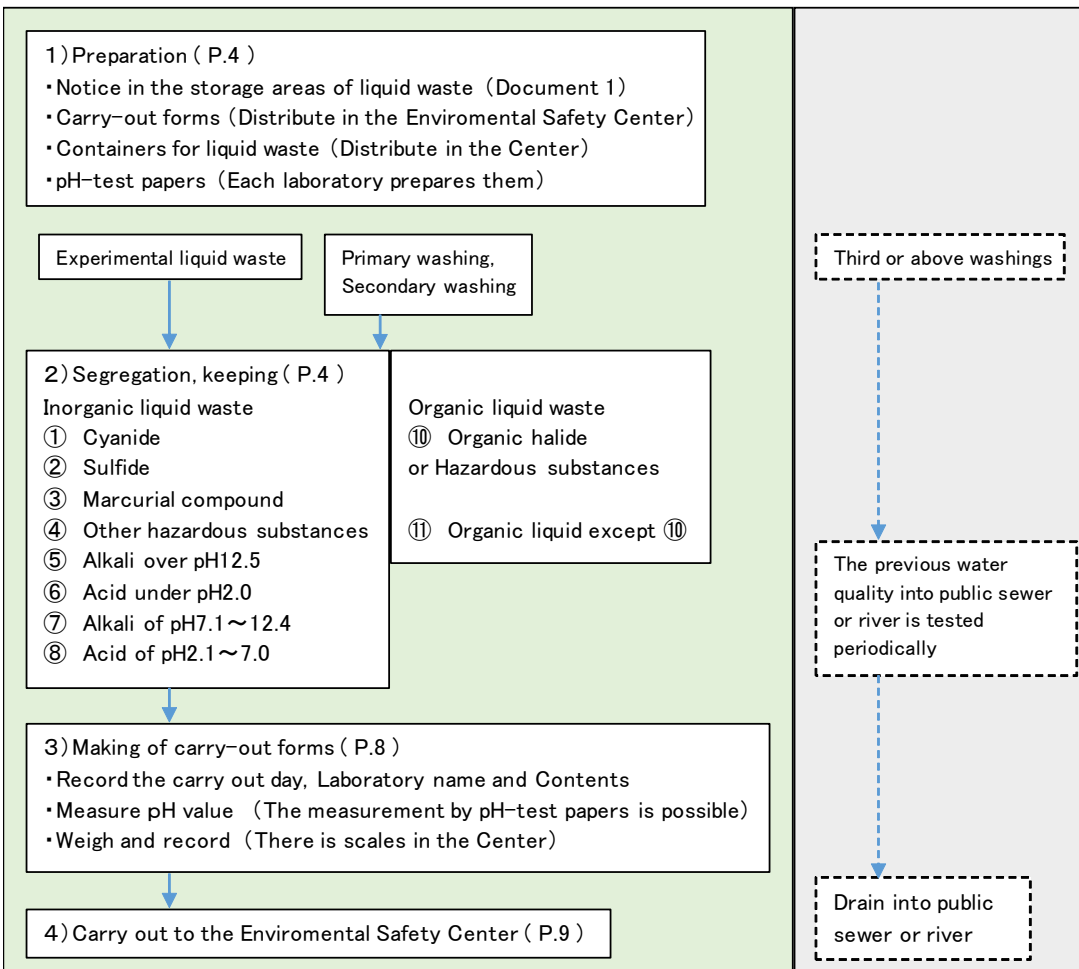
The waste which you must not carry in to the Enviromental Safety Center

- Unnecessary chemicals, ● Nuclear fuel materials, ● Polychlorinated biphenyls, ● Asbestou

The phone numbers about the experimental liquid waste

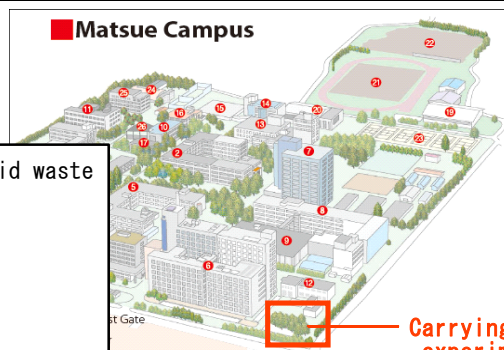
"Envirometal management charge ( Extension:2319 External:0852-32-9829 )" "Enviromental safety center ( Extension:2348 External:0852-32-8914 )"

The flowchart of experimental liquid waste ( including photography, pigment )



- The waste which you must not carry in to the Enviromental Safety Center.
- Nuclear fuel materials
  - Unnecessary chemicals
  - Polychlorinated biphenyls
  - Asbestou

※Pagenumbers and Document number during a flowindicates something of separate volume



The phone numbers about the experimental liquid waste

- 1) Enviromental management charge  
Extension : 2319  
External : 0852-32-9829
- 2) Enviromental safety center  
Extension : 2348  
External : 0852-32-8914

Sample form of experimental liquid waste carry-out "HAZARDOUS SUBSTANCES"

Carry-out form of "inorganic liquid waste including HAZARDOUS SUBSTANCES"  
「有害物類」無機廃液搬出票

Carry out day 搬出日	yyyy mm dd ○○○○ 年 ○月 ○日	Faculty 学部等	Education 教育	Human sciences 人間科学	Science and Engineering 総理工	Life and Environmental science 生物資源	Other 他( )
Container division and Cautions	① Cyanide シアン化合物	Make the liquid waste strong alkaline, pH12 or above by adding NaOH or KOH etc 強アルカリ性(pH12以上)として貯留し、搬出すること					
容器区分と注意事項	② Sulfide 硫化物含有						
	③ Mercurial compound 水銀化合物含有	Liquid waste including Hg, Organic Hg, accumulate according to a manual 水銀塩を含む廃液、有機水銀を含む廃液、手引書に従い貯留搬出すること					
	④ Other hazardous substances 他、有害物含有	Cd, Pb, Organic phosphorus, Cr <sup>6+</sup> , As, Se カドミウム、鉛、有機リン、六価クロム、ヒ素、セレン					
Specification of contents Experiment instrumentation using Hg 内容物、水銀器具類	Mark "○" the number of the container carried out. Mention the chemicals accumulated in a container. Pb, HNO <sub>3</sub> etc. When there is a possibility that chemicals in the liquid waste swell a container, mention the effect.						
pH	4	Weight 重量	6.8	kg			

注1. 区分により処理方法が異なるので、処理の安全のために廃液区分を徹底すること。 Measure and record the pH value when carrying out the liquid waste.  
注2. 搬出する廃液は、必ず pHを確認し記入すること。  
注3. Record a matter necessary for a carry-out form and tie it to every container. 搬出票に必要事項を明記し、必ず容器ごとにシッカリと結び付けて搬出すること。

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Copy for Shimane University  
学内控え  
Carry-out form of "inorganic liquid waste including HAZARDOUS SUBSTANCES"  
「有害物類」無機廃液搬出票

Carry out day 搬出日	yyyy mm dd ○○○○ 年 ○月 ○日	Department 学部等	Education 教育	Human sciences 人間科学	Science and Engineering 総理工	Life and Environmental science 生物資源	Other 他( )
Teacher name 教員氏名	Taro Shimadai	Department 学科等	○○○	Laboratory name 研究室等	○○○		
Container division and Cautions	① Cyanide シアン化合物	Make the liquid waste strong alkaline, pH12 or above by adding NaOH or KOH etc 強アルカリ性(pH12以上)として貯留し、搬出すること					
容器区分と注意事項	② Sulfide 硫化物含有						
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	④ Other hazardous substances 他、有害物含有	Cd, Pb, Organic phosphorus, Cr <sup>6+</sup> , As, Se カドミウム、鉛、有機リン、六価クロム、ヒ素、セレン					
Specification of contents Experiment instrumentation using Hg 内容物、水銀器具類	Mention the same one as the upper mentioning contents here.						
pH	4	Weight 重量	6.8	kg			