

[Example of storage]



Use bars or glass panes to prevent containers from falling in the event of an earthquake.



Prevent bottles from contacting each other in the event of an earthquake.

Take inventory of chemicals registered in YAKUMO regularly. YAKUMO's inventory function enables users to check chemicals registered in YAKUMO by scanning barcodes (storage numbers). Inventory taking helps check the usage or disposal registration in YAKUMO or clarify problems, such as differences between the storage areas registered in YAKUMO and actual storage areas. (For details, refer to the inventory taking manual.)

2. Storage of poisonous and deleterious substances

Poisonous and deleterious substances are specified in the Poisonous and Deleterious Substances Control Act, and their handling is regulated by the act. Poisonous and deleterious substances are specified based on their lethal doses and social impacts resulting from scandals, etc. Management of poisonous and deleterious substances is strictly regulated. It is necessary to prevent theft and loss.

Check the labels of chemical substances stored to determine whether they fall under the category of poisonous or deleterious substances. Labels of relevant chemical substances indicate "poisonous substance: not for medical use" ("Poisonous" in white letters on a red label) or "deleterious substance: not for medical use" ("Deleterious" in red letters on a white label).

The University Guidelines stipulate the storage of poisonous and deleterious substances as follows.

Article 6 of the Guidelines (Storage of Poisonous and Deleterious Substances)

1. The Chemical Substance Managers shall ensure that the Poisonous and Deleterious Substances are stored in a securely lockable storage location (which shall be metallic and difficult to carry around; hereinafter the same applies in this article) with clear distinction from other items and ensure that the storage location is locked at all times.
2. The Chemical Substance Managers shall, on their own responsibility, manage and hold the key(s) for the storage location(s) in their possession and keep a management book for such key(s).
3. The Chemical Substance Managers shall appoint an agent for storage of Poisonous and Deleterious Substances. If a Chemical Substance Manager is absent, the agent shall lock the storage location and manage the key.
4. The Chemical Substance Managers shall indicate their names on the storage location(s) containing Poisonous and Deleterious Substances as well as ensuring that:
 - Each of the Poisonous Substances is marked "Poison" in white letters on a red label, together with the indication "Not for Medical Use," and
 - Each of the Deleterious Substances is marked "Deleterious" in red letters on a white label, together with the indication "Not for Medical Use."
5. Whenever any of the Poisonous and Deleterious Substances is used, the Chemical Substance Manager responsible for such use shall record the consumption in weight or volume and keep the record on file for five years from the date of the end of use.

That is, poisonous and deleterious substances must be stored in a securely lockable storage location with clear distinction from other items, and such storage location must be locked at all times. A management book must be kept for the keys for storage locations. The form can be downloaded from “Manuals/Materials” on the top bar of the YAKUMO screen.

At the University, the sign below must be displayed at storage locations for poisonous and deleterious substances. Poisonous and deleterious substances must be stored in these storage locations. Contact the Environmental Safety Center to obtain the sign.



Fig. 4-1 A sign that is displayed at storage locations for poisonous and deleterious substances

[What happens if poisonous and deleterious substances are not stored properly?]

- In September 2019, a chemical that contained carbon tetrachloride and carbon disulfide (deleterious substances) was lost at a university. The police investigated the case on suspicion of theft. The chemical was found to have been disposed of properly. Improper management of poisonous and deleterious substances lead to a police investigation and an on-site inspection and verification by a health center.

3. Storage of hazardous materials

Hazardous materials are chemical substances that may cause a fire or explosion as defined in the Fire Service Act. Hazardous materials pose difficulties in extinguishing fire and hazards of spreading fire. A fire-prevention area is designated to handle hazardous materials. The quantity that can be handled is also designated (designated quantity). In the event of an earthquake, etc., hazardous materials may leak and cause a secondary accident, such as a fire. Article 4 of the Guidelines stipulates the storage of hazardous materials as follows.

Article 4 of the Guidelines (Storage of Hazardous Materials, etc.)

1. A laboratory, etc. shall be regarded as a unit of management area for storage and use of hazardous materials. The quantity of any hazardous material stored and used in each said area shall be less than one fifth of the designated quantity.
2. When multiple Chemical Substance Handling Groups (hereinafter referred to as “Groups”) store and use hazardous materials in a single management area, the quantity stored and used by each Group (hereinafter referred to as the “Standard Allocation Quantity”) shall be less than the quantity obtained by dividing one fifth of the designated quantity by the number of such Groups in principle. In this case, each Group shall be able to add or subtract a certain quantity to or from the Standard Allocation Quantity within the scope that the total of the Standard Allocation Quantity of all the Groups within such management area does not reach one fifth of the designated quantity for mutual adjustments.
3. Any hazardous material whose quantity is one fifth or more of the designated quantity shall be stored in the Hazardous Material Indoor Storage Facility. If the quantity of such hazardous material is one fifth of the designated quantity or more but not exceeding the specified quantity, it may be stored in the Small Quantity Hazardous Material Handling Area.