



INSTITUTIONAL ANIMAL CARE
AND USE COMMITTEE

IACUC POLICY # 13 USE OF DI-ETHYL ETHER AS AN ANIMAL ANESTHETIC

1. Di-ethyl ether (ether) is highly flammable and explosive. It is a hazardous substance which requires careful attention to safety precaution when it must be used. You are encouraged to use it only when no reasonable alternatives exist. When its use is necessary, ether must be used only in facilities designed and approved for its use and in a manner which will avoid the known hazards.
2. Facilities where ether is used must be designed such that sparks or open flame cannot occur to ignite the material.
3. Specifically, the use of ether in animal rooms and Animal Resource Facilities procedures rooms is prohibited. There are no Animal Resource Facilities designed for the safe use and storage of ether.
4. Euthanasia of animals with ether creates a special hazard. Normally, disposal of research animal carcasses is via incineration. Tissues of animals killed with ether are saturated with ether and cannot be safely placed in an incinerator.
5. Alternatives to the use of ether as an animal anesthetic include the gases halothane and methoxyflurane; the injectable barbiturates; and combinations of ketamine with xylazine, acepromazine, and diazepam. In the case of euthanasia, the inhalant anesthetics and barbiturates given in excess are acceptable. For small rodents and lagomorphs, carbon dioxide gas is recommended. For further information, contact Animal Resource Facilities at 777-8106.
6. With storage of open containers of ether, there is a likelihood of the production of explosive peroxides. Therefore, storage of ether, after the manufacturers seal on the container has been broken, is not recommended. If storage is required, it must be only in explosion proof areas. Storage in Animal Resource Facilities is prohibited.
7. For safe disposal of unused ether, opened ether cans or out-dated unopened ether containers, you should contact Environmental Health and Safety at 777-5269.

