



Dartmouth College

Animal Care and Use Program

Institutional Animal Care and Use Committee

### IACUC Policies and Procedures

**Title:** Avertin® (2,2,2 Tribromoethanol)

Avertin® is a non-pharmaceutical grade compound. The use of non-pharmaceutical grade compounds is discouraged without justification by the USDA Animal Welfare Act and OLAW, the rules of which are applied to all vertebrate research animals at Dartmouth College. Prior to using Avertin®, scientific justification that details why pharmaceutical grade drugs are not appropriate must be reviewed and approved by the IACUC.

**USDA Policy 3:**

*Investigators are expected to use pharmaceutical-grade medications whenever they are available, even in acute procedures. Non-pharmaceutical-grade chemical compounds should only be used after specific review and approval by the IACUC for reasons such as scientific necessity or non-availability of an acceptable veterinary or human pharmaceutical-grade product. Cost savings alone are not an adequate justification for using non-pharmaceutical grade compounds in animals. See [http://www.aphis.usda.gov/animal\\_welfare/downloads/policy/policy3.pdf](http://www.aphis.usda.gov/animal_welfare/downloads/policy/policy3.pdf)*

**Avertin® in Mice:**

Avertin® (2,2,2 Tribromoethanol) is a commonly used anesthetic for surgery in rodents. Literature shows that Avertin® has toxic breakdown products that if not stored properly can cause mortality in mice. Even when stored properly (or freshly made) it has been reported to cause peritonitis in mice (Zeller 1998) and rats (Reid 1999). Although this peritonitis is only rarely associated with morbidity or mortality (Pappianou 1993), we have to presume that peritonitis is painful and should be avoided when possible..

**Policy**

Under normal circumstances, Avertin® should only be used for non-survival surgery. The use of Avertin® may be considered for the following circumstances if scientifically justified.

- When generating transgenics (because of historical use)
- For terminal procedures
- When no other anesthetics are acceptable