

Use of Reproductive Hormones

Purpose:

To provide guidance for the use of Hormones in the laboratory and animal facility environment. Various reproductive hormones are used at UW-Madison in animal research for a variety of research applications. Substances include but are not limited to Gonadotropin releasing hormone, Human chorionic gonadotropin, Testosterone, Estradiol, Progesterone, Prolactin, and Prostaglandin F2a.

Precautions:

The following information can be used to complete the Safety section of your animal protocol.

1. Chemical hazard agents – (Identify the category of the chemical): (*Select the following*)
 - Carcinogen
 - Reproductive Hazard/Teratogen
2. Containment preparation – (Containment equipment required for the preparation of the chemical): (*Select both options and include additional information for Other*)
 - Fume Hood
 - Other: if powder form is used then that preparation will be done in a fume hood and safety glasses will be worn in addition to standard PPE.
3. Containment animals – (Containment equipment required for chemical administration and handling animals after exposure to the chemical): (*Select the following*)
 - No special containment needed
4. PPE needed - (for handling live animals, carcasses or animal waste/dirty bedding): (*Select the following*)
 - Exam gloves – nitrile
 - Safety glasses/goggles
 - Lab coat or disposable gown
5. Waste Disposal: (disposal of animal waste/dirty bedding from animals after exposure to the chemical) (*Select the following*)
 - No special precautions needed for waste/dirty bedding
6. Carcass disposal: (*Select the following*)
 - Pick up by EH&S for incineration.
 - NOTE: For agricultural animals, select Other and add “Use facility standard method.”
7. Chemical human risk: (*Add the following for the appropriate hormone*)

- Most reproductive hormones are potentially toxic as teratogens and carcinogens. Pregnant and lactating women should avoid exposure to reproductive hormones.
- *For Estrumate (prostaglandin F2a) add the following:* Estrumate is reproductive and respiratory (including asthmatics) hazard so it should be handled with extreme caution. Estrumate is readily absorbed through the skin and may cause abortion and/or bronchospasm.

Additional Information:

For reproductive hormones used in the farm environment PPE needed includes long sleeves and nitrile/latex gloves. If fume hood is unavailable or the powder will remain in contained in a closed bottle, containment preparation should be performed in a well-ventilated area.

References:

“Testosterone SDS”

<http://www.sigmaaldrich.com/catalog/product/sigma/t1500?lang=en®ion=US>

“Estrogen SDS”

<http://www.sigmaaldrich.com/catalog/product/sial/phr1353?lang=en®ion=US>

“Progesterone SDS”

<http://www.sigmaaldrich.com/catalog/product/sigma/p8783?lang=en®ion=US>

“Prolactin SDS”

<http://www.sigmaaldrich.com/catalog/product/sigma/l4021?lang=en®ion=US>

“Estrumate guidance”

<https://dailymed.nlm.nih.gov/dailymed/fda/fdaDrugXsl.cfm?setid=8238c676-6473-4ceb-8875-c7b43cfb9e22>