

# **INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE**

USE OF POTENTIALLY HAZARDOUS CHEMICAL AGENTS IN ANIMALS RSP 402.1 | rev. 10/6/2020



The purpose of this form is to provide information to the EHRS department for assessment of each chemical delivered to animals and determine appropriate steps required to safeguard those working with animals. EHRS classifies chemicals in levels ranging from Chem 0 to Chem 3 which dictate required personal protective equipment (PPE) and other safety controls (i.e., waste disposal practices, cleaning practices). In the event of limited information, the chemical agent is classified as a Chem 2.

Attach a copy of the SDS (i.e., <u>CHEMWATCH</u>). If an SDS is not available, provide any known data regarding the agent. If peer-reviewed literature exists describing excretion (shedding) and metabolism of <u>this agent</u> in <u>this species</u>, please include a copy of the journal article(s). Lab Specific Chemical Hygiene Plans are required: <a href="http://www.utoledo.edu/depts/safety/docs/HM-08-026%20Appendix%20A.pdf">http://www.utoledo.edu/depts/safety/docs/HM-08-026%20Appendix%20A.pdf</a>

Carcinogen  Mutagen  LD50  OR  LC50  Occupational Exposure Limit (i.e. TLV, PEL, REL, etc.)  How long after administration does animal shed the agent?  ection C:  1. Species  2. How will you be dosing your animal/s  SQ Injection,  PI Injection, Oral Gavage, Drinking water Other  3. Treatment dose of chemical agent: mg/kg of animal Submitter must convert if not reported in mg/kg  If 3 is blank, fill in 5  4. Max number of animals dosed per experimental group  5. Concentration of chemical agent dosed per animal  a) Volume/weight of dose per animal enable of the special agent dosed per animal anal on the special agent dosed per animal per day and the special agent dosed per animal per day and the special agent dosed per animal anal on the special ag	Chemical Agent		CAS#			
Carcinogen Reproductive Toxin  Mutagen Hazardous Drug Antineoplastic Drug (per NIO  LD50 OR LC50 Occupational Exposure Limit (i.e. TLV, PEL, REL, etc.) How long after administration does animal shed the agent?  ection C:  1. Species Mouse (25g), Rat (350g), Rabbit (1.2kg), Other  2. How will you be dosing your animal/s SQ Injection, PIP Injection, Oral Gavage, Drinking water Other  3. Treatment dose of chemical agent: mg/kg of animal Submitter must convert if not reported in mg/kg If 3 is blank, fill in 5  4. Max number of animals dosed per experimental group  5. Concentration of chemical agent dosed per animal a) Volume/weight of dose per animal per day* 6. Number of doses per 7-day period per animal 7. Location of animals being dosed HEB DLAR, Wolfe Hall DLAR Vivarium, Other  Written description of dosing your chemical:  For chemicals delivered in animal drinking water, volume of water ingested per day per one animal is estimated as 0.0055L for mice, 0.35L for rats, and 0.350L for rabbits.  EVIEW and DETERMINATION (For EHRS ONLY)	Protocol Number		Principal Investigator			
Mutagen  LD50 OR LC50  Occupational Exposure Limit (i.e. TLV, PEL, REL, etc.)  How long after administration does animal shed the agent?  ection C:  1. Species  Mouse (25g), Rat (350g), Rabbit (1.2kg), Other  2. How will you be dosing your animal/s  SQ Injection, PI Injection, Oral Gavage, Drinking water Other  3. Treatment dose of chemical agent: mg/kg of animal Submitter must convert if not reported in mg/kg if 3 is blank, fill in 5  4. Max number of animals dosed per experimental group  5. Concentration of chemical agent dosed per animal  a) Volume/weight of dose per animal  a) Volume/weight of dose per animal  7. Location of animals being dosed  HEB DLAR, Wolfe Hall DLAR Vivarium, Other  Written description of dosing your chemical:  For chemicals delivered in animal drinking water, volume of water ingested per day per one animal is estimated as 0.0055L for mice, 0.35L for rats, and 0.35OL for rabbits.  EVIEW and DETERMINATION (For EHRS ONLY)	Submitter		Email			
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LD50 OR LC50  Occupational Exposure Limit (i.e. TLV, PEL, REL, etc.)  How long after administration does animal shed the agent?  ection C:  1. Species  2. How will you be dosing your animal/s  3. Treatment dose of chemical agent: mg/kg of animal Submitter must convert if not reported in mg/kg If 3 is blank, fill in 5  4. Max number of animals dosed per experimental group  5. Concentration of chemical agent dosed per animal  a) Volume/weight of dose per animal per day*  6. Number of doses per 7-day period per animal  7. Location of animals being dosed  Written description of dosing your chemical:  For chemicals delivered in animal drinking water, volume of water ingested per day per one animal is estimated as 0.0055L for mice, .035L for rats, and 0.350L for rabbits.			Rep	roductive Toxin		
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0.035L for rats, and 0.350L for rabbits.  REVIEW and DETERMINATION (For EHRS ONLY)						
		e of water	ingested	per day per one a	animal is estimated as 0.005	55L for mice,
he above agent has been determined to be:						
CHEM 0 CHEM 1 CHEM 2 CHEM 3				CUENAS	CUENA	



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#### Additional Notes for PI and Researchers:

- All personnel working with the agent must have read the SDS and completed all EHRS and DLAR training requirements. The Principal Investigator is responsible for assuring that all personnel working on the research project have training in laboratory health and safety. Contact Environmental Health and Radiation Safety (EHRS) or DLAR for more information.
- 2. Spills and personnel exposure must be managed as described in the EHRS procedures.
- **3.** All personnel using respirators must comply with the respiratory protection program, which requires medical clearance and respirator specific fit testing.
- 4. DLAR management must be notified in writing in advance of the use of this agent.

## Helpful tips for filling out the form:

1. The goal here is to find out how much of the given chemical is being used at a given time and for what duration. The determination of CHEM level takes into consideration the amount dosed per animal, animal size, number of animals present, number of doses to each animal during a 7 day period.

### **Examples:**

- a. Dosing through the drinking water for 7 days. How much chemical is used in the bottle of water, how many cages and the number of animals per cage (gives us your group size) are receiving this and how much the animals drink daily. This will give us the estimated amount of chemical exposure for that cage.
- b. Dosing by SQ injection for 3 days. Outline the concentration and amount of chemical being dosed each time. Your dosing 3 days in a row which means that cage of animals will be receiving 3 x (amount of each dose) = total amount of chemical in each cage.
- 2. In Section C, box 4: List the max number of animals dosed per experimental group. Do not list the overall number of animals used for the duration of the protocol, but rather how many animals will be dosed in an experimental group.
- 3. A written description of dosing your chemical in animals will aid the reviewer when they are classifying the chemical hazard level.