**Carbon Dioxide Euthanasia Instructions**

**Flow Rates**

For each chamber size, you must calculate the flow rate required for approximately 50% displacement. For example, internal chamber dimensions = 10 x 8 x 5 inches = 400 in3/61.02 = 6.55 L x 50% = 3.28 L/min. (61.02 in3 = 1 liter)

Once these have been calculated, fill out table below:

|  |  |  |
| --- | --- | --- |
| **Cage Type** | **Cage Dimensions** | **Flow Rate** |
|  |  |  |
|  |  |  |
|  |  |  |

**Important Reminders**

* Do not exceed cage density regulations (see Rodent Overcrowding Policy).
* Do not mix animals from different cages or different species.
* Do not leave animals unattended.
* Young (< 10 days) or sick animals may require additional CO2 exposure time due to resistance to hypoxia.
* Keep CO2 on for at least 1 minute after the animals stop breathing. Then perform a required secondary method of euthanasia below:
  + Cervical Dislocation (only for rodents < 200 g)
  + Decapitation
  + Bilateral Thoracotomy
  + Exsanguination
* If using the same chamber for serial euthanasias, the chamber should be cleaned and left open for 2 minutes to allow previous CO2 to dissipate so the chamber is not pre-charged.
* Any animal not properly euthanized must be reported to the IACUC.

**Please contact vivarium staff for training on any of the above procedures**

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