



Doxycycline diets for Tet regulated systems

Envigo makes a variety of doxycycline containing diets for your Tet regulated systems.

TD.01306 with doxycycline hyclate added at 625 mg/kg to Teklad global 2018 rodent diet is stocked and can typically ship within 1 – 2 days (non-irradiated) or 1 – 2 weeks (irradiated).

Diets are easily customizable with custom specifications including: base diet, concentration of doxycycline, and food coloring.

If you have any questions, please contact our team of Envigo nutritionists at askanutritionist@envigo.com.

Table 1:

Formula examples with Teklad global 2018 base diet		
Doxycycline hyclate ¹ USP (mg/kg diet)	Natural color	Alternatives with food coloring
46	TD.10483	TD.180327 Red TD.120240 Blue
100	TD.04233	TD.130840 Blue
200	TD.00502	TD.180625 Red TD.150431 Blue TD.04104 Green
625	TD.01306 stocked²	TD.08541 Red TD.120769 Blue TD.09628 Green
1000	TD.05298	TD.06294 Red TD.120658 Blue
2000	TD.05512	TD.140011 Red TD.09633 Green
6000	TD.01533	

¹ Doxycycline hyclate is ~87% doxycycline

² TD.01306 typically ships within 2 days non-irradiated or 2 weeks with irradiation

Considerations when choosing a base diet

- + Teklad Global Rodent Diets® like 2018 do not contain alfalfa and are thus ideal if your work requires an alfalfa-free diet for fluorescent imaging. If further imaging clarity is needed, we can make purified diets with doxycycline.
- + Teklad Global Rodent diet 2018 (base diet in **Table 1** examples) contains a moderate amount of soybean meal, a source of phytoestrogens. **Table 2** includes several options of minimal phytoestrogen diets with the most common doxycycline concentration of 625 mg/kg diet.

For other concentrations contact our nutritionist team at askanutritionist@envigo.com.



Table 2:

Examples of minimal phytoestrogen global rodent diets with doxycycline hyclate ¹ at 625 ² mg/kg diet		
Base diet	Natural color	Alternatives with food coloring
2014	TD.00426	TD.07382 Red TD.07573 Yellow
2016	TD.02503	TD.140263 Blue TD.170364 Red
2019	TD.09651	TD.09761 Green
2020	TD.110720	TD.130141 Red

¹ Doxycycline hyclate is ~87% doxycycline

² Additional concentrations in these base diets are available

Advantages of diet delivery of doxycycline

- + Typically the same doxycycline concentration can be used in diet as in water. Lower concentrations of doxycycline may be adequate with 625 mg/kg diet being the most common concentration.
- + Diet offers protection from light. Water may have to be given in dark-colored or foil-wrapped bottles.
- + Diet is typically changed once per week while water may need to be changed every few days.
- + Diet delivery may also reduce risk of dehydration and preclude the need to give with sucrose.

Key planning information

- + Minimum order quantity is 3 kg, sufficient for feeding ~20 mice for one month.
- + Store diet refrigerated and plan to use within six months.
- + Typical lead time is two weeks (four weeks if irradiated).
- + TD.01306 typically ships within 2 days non-irradiated or 2 weeks with irradiation.
- + Irradiation (20 - 50 kGy) is optional and must be requested at time of order.

Safe handling of doxycycline diets

- + Doxycycline is a tetracycline class antibiotic.
- + Usual dose for therapeutic effects in humans is 100-200 mg/day. Doxycycline diets for rodents typically contain ~2 mg/pellet.
- + Accidental doxycycline exposure can be minimized by using typical lab precautions of lab coat, gloves, and mask when handling the diet.
- + Your chemical safety department should be contacted for additional institution specific guidelines for handling and disposal of doxycycline containing diets.

Contact us

At askanutritionist@envigo.com with your specific needs, and we can recommend an existing product code or create a new formulation.

Contact us

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