

TELEPHONE: 514-905-5096 FAX: 514-905-5097 technicalservices@medisca.net

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Suggested Formula	Blank Oral Chewable Treats (Solid Suspension, 60 x 4.0 mL Treats)	FIN	F 005 250v3

SUGGESTED FORMULATION

Ingredient Listing	Qty.	Unit	NDC#	Supplier	Lot Number	Expiry Date
APIs**	TBD					
Stevia Powder	2.40	g				
Glycerin, USP***	24.0	mL				
Beef Flavor (Powder)	12.00	g				
Chew-A-Treat [™] Compound A	93.12	g				
Chew-A-Treat TM Compound B	186.24	g	(%)			

^{**}Note: APIs can be added by using 0.7 displacement factor to accordingly reduce Compound A and B in the 1:2 ratio.

SPECIAL PREPARATORY CONSIDERATIONS

<u>Ingredient-Specific Information</u>							
Hygroscopic (protect from moisture whenever possible): Glycerin, Stevia Powder							
Suggested Preparatory Guidelines							
Non-Sterile Preparat	ion Sterile Preparation						
<u>Processing Error /</u> <u>Testing Considerations</u> :	To account for processing error considerations during preparation, it is suggested to measure an additional 3 to 5% of the required quantities of ingredients.						
Special Instruction:	Protective apparel, such as a lab coat, disposable gloves, eyewear and face-masks should always be worn.						
	This procedure requires the use of very small quantities of ingredients. All calculations and preparation techniques must be verified before dispensing the final product.						

^{***}Note: Caprylic/Capric Triglyceride can be used to replace Glycerin to reduce stickiness.



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SUGGESTED PREPARATION (for 60 x 4.0 mL Treats)

Weigh and / or measure the following ingredients when appropriate:

Ingredient Listing	Qty.	Unit	Multiplication factor (*):	Processing Error	Qty. to measure
APIs	TBD				
Stevia Powder §	2.40	g			
Glycerin, USP §	24.0	mL			
Beef Flavor (Powder)	12.00	g			
Chew-A-Treat [™] Compound A	93.12	g	(S)		
Chew-A-Treat™ Compound B	186.24	g			

- Takes into account increased batch size conversions and density conversions, if required.
- § Weigh / measure just prior to use.

Preparatory Instruction

1. **Mold lubrication:**

A. Lubricate all parts of the Chew-A-TreatTM Mold with suitable vegetable spray and set aside.

Note: Selected vegetable spray needs to be compatible with API(s) and all other ingredients within the formulation.

2. **Powder preparation:**

- A. Triturate the Chew-A-TreatTM Compound B to form a fine, homogeneous powder blend.
- B. Triturate the APIs to form a fine, homogeneous powder blend.
- C. By geometric addition, combine and mix the following ingredients together to form a homogeneous mixture:
 - -Fine, homogeneous powder blend (Step 2B)
 - -Stevia Powder
 - -Beef Flavor (Powder)
 - -Fine, homogeneous powder blend (Step 2A)
- D. Transfer the mixture (Step 2C) to a beaker and incrementally add the Glycerin.

Specifications: Continuously mix until homogeneous.

End result: Homogeneous moist blend.

<u>Note</u>: The mixture will have a sand-like texture. If it begins to stick to your stirring device or beaker, you can simply scrape it off and continue mixing.



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3. **Medium integration:**

- A. Prepare a hot water bath to between 60°C and 65°C.
- B. Using the hot water bath, melt the Chew-A-TreatTM Compound A.

Specifications: Continuously mix.

Maintain temperature between 60°C and 65°C.

End result: Homogeneous thick, sticky liquid-like dispersion.

C. Incrementally add the homogeneous moist blend (Step 2D) to the melted Chew-A-TreatTM Compound A (Step 3B).

Specifications: Continuously mix until homogeneous.

Maintain temperature between 60°C and 65°C.

End result: Homogeneous thick, sticky paste-like dispersion.

4. **Mold filling:**

- A. Properly lubricate gloves (thumbs, forefingers, and palms) throughout filling.
- B. Continuing to heat the mixture between 60 to 65°C, remove a marble-sized quantity of the mixture at a time and roll it between your thumb and forefinger to form a cylinder. Pack the 60 mold cavities with these cylinders and scrape off any excess with pre-lubricated plastic scraper.
- C. Once the treats have been packed down with an extractor, apply a thin layer of lubricant to give a shiny surface.
- D. Allow the treats to cool at room temperature for at least 15 minutes and then remove them from the mold using the extractor.

5. Validation technique:

- A. Weigh 12 chewable treats.
- B. The final weight of each chewable treat shall not be less than 90% and not more than 110% of the theoretically calculated weight 5.40 g in accordance to USP guidelines.

6. **Product transfer:**

Transfer the final product into the specified dispensing container (see "Packaging Requirements").



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Formula	Brank Oral Chewable Treats (Solid Suspension, 60 x 4.0 mL Treats)	LIIN	F 003 230V3

SUGGESTED PRESENTATION

Estimated Beyond-Use Date		30 days, as per USP.	Packa Requirem		Manually put into Chew-A-Treat blisters and cold seal with foil labels.
	1	Use as directed. Do not exceed dose.	d prescribed	4	Keep in a dry place.
Auxiliary Labels	2	Keep out of reach of children.		5	Consult your health care practitioner if any prescription or over-the-counter medications are currently being used or are prescribed for future use.
	3 For Canine use only.		6	Keep at room temperature (20°C – 23°C).	
Pharmacist Instructions	Add any auxiliary labels specific to the API to the dispensing container as deemed necessary.				
Patient Instructions	If allergic reactions occur, consult your pharmacist.				

REFERENCES

1.	Lozenges/Troches. In: Allen, LV, Jr. <i>The Art, Science and Technology of Pharmaceutical Compounding Third Edition</i> . American Pharmaceutical Association; 2008: 153.
2.	Gelatin. In: Rowe RC. <i>Handbook of Pharmaceutical Excipients</i> , 6 th <i>Edition</i> . American Pharmaceutical Association; 2009: 278.
3.	Glycerin. In: Rowe RC. <i>Handbook of Pharmaceutical Excipients</i> , 6 th <i>Edition</i> . American Pharmaceutical Association; 2009: 283.
4.	USP <795>. <i>United States Pharmacopeia XXXV / National Formulary 30</i> . Rockville, MD. US Pharmacopeial Convention, Inc. 2012: 344.

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