

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

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Suggested Formula	Ketoconazole 2%, Salicylic Acid 2% Topical Shampoo (Solution, 100 mL)	FIN	F 006 819v2
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SUGGESTED FORMULATION

Ingredient Listing	Qty.	Unit	NDC #	Supplier	Lot Number	Expiry Date
Ketoconazole, USP	2.000	g				
Salicylic Acid (Hydrosoluble, 50%)	4.00	mL				
Citric Acid 25% Solution	6.0	mL				
Medisca ADA TM Shampoo Base	80.0	mL				
Purified Water, USP	q.s. to 100.0	mL	©			

SPECIAL PREPARATORY CONSIDERATIONS

Ingredient-Specific Information	
Light sensitive (protect from lig	ght whenever possible): Ketoconazole, Salicylic Acid
Suggested Preparatory Guidelines	
Non-Sterile Preparati	ion
<u>Processing Error /</u> <u>Testing Considerations</u> :	To account for processing error considerations during preparation, it is suggested to measure an additional 5 to 9% 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.



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SUGGESTED PREPARATION (for 100 mL)

Weigh and / or measure the following ingredients when appropriate:

Ingredient Listing	Qty.	Unit	Multiplication factor (*):	Processing Error	Qty. to measure
Ketoconazole, USP §	2.000	g			
Salicylic Acid (Hydrosoluble, 50%) §	4.00	mL			
Citric Acid 25% Solution	6.0	mL	(
Medisca ADA TM Shampoo Base	80.0	mL			
Purified Water, USP	q.s. to 100.0	mL	1		

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

Preparatory Instruction

1. **Powder-liquid preparation:**

A. Incrementally add the Ketoconazole to the Citric Acid 25% Solution.

Specifications: Continuously mix until homogeneous.

End result: Homogeneous liquid-like dispersion.

2. **Powder-liquid preparation:**

A. Incrementally add the ADATM Shampoo Base to the homogeneous liquid-like dispersion (Step 1A).

Specifications: Continuously mix until all solid particles have completely dissolved.

End result: Homogeneous liquid-like solution.

B. Incrementally add the Salicylic Acid (Hydrosoluble, 50%) to the homogeneous liquid-like solution (Step 2A).

Specifications: Continuously mix.

End result: Homogeneous liquid-like solution.



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3. **Filling to volume:**

A. Add Purified Water to the mixture (Step 2B) to fill to the required batch size (100.0 mL *plus* processing error adjustments).

Specifications: Continuously mix until homogeneous.

End result: Homogeneous liquid-like solution.

4. **Product transfer:**

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

SUGGESTED PRESENTATION

"	GESTED PRE	-3E	NIATION				
	Estima Beyond-Use D		30 days, as per USP.	Packa Requirem		 Tightly closed, light-resistant topical dispensing bottle. To be administered with a metered-dose measuring device. 	
		1	Use as directed. Do not exceed dose.	l prescribed	6	Cap tightly after use.	
		2	Keep out of reach of children.		7	Protect from light.	
	Auxiliary Labels	3	Consult your health care practit other prescription or over medications are currently being prescribed for future use.	-the-counter	8	For external use only.	
		4	Keep at room temperature (20°C	C – 23°C).	9	Do not take with alcohol, sleep aids, tranquilizers or other CNS depressants.	
		5	May impair mental and/or phys Use care when operating a car or				
	Pharmacist Instructions	Add any auxiliary labels specific to the API to the dispensing container as deemed necessary.					
	Patient Instructions	Contact your pharmacist in the event of adverse reactions. IMPORTANT: The quantity of API administered is directly dependent on the quantity of product applied.					



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REFERENCES

1.	Cosmetics for special populations and for use as vehicles. In: Allen, LV, Jr. <i>The Art, Science and Technology of Pharmaceutical Compounding Fourth Edition</i> . American Pharmaceutical Association; 2012: 441.
2.	Ketoconazole. In: Sweetman SC, ed. <i>Martindale: The Complete Drug Reference</i> , 36 th Edition. London, England: The Pharmaceutical Press; 2009: 539.
3.	Salicylic Acid. In: Sweetman SC, ed. <i>Martindale: The Complete Drug Reference</i> , 36 th Edition. London, England: The Pharmaceutical Press; 2009: 1612.
4.	Ketoconazole (Monograph). In: O'Neil MJ. <i>The Merck Index 15th Edition</i> . Whitehouse Station, NJ: Merck & Co, Inc.; 2013: #5349.
5.	Salicylic Acid (Monograph). In: O'Neil MJ. <i>The Merck Index 15th Edition</i> . Whitehouse Station, NJ: Merck & Co, Inc.; 2013: #8469.
6.	Ketoconazole. In: Trissel LA. <i>Trissel's Stability of Compounded Formulations</i> , 5 th Edition. American Pharmaceutical Association; 2012: 271.
7.	Salicylic Acid. In: Trissel LA. <i>Trissel's Stability of Compounded Formulations</i> , 5 th Edition. American Pharmaceutical Association; 2012: 432.
8.	Ketoconazole (Monograph). <i>United States Pharmacopeia XXXIX / National Formulary 34</i> . Rockville, MD. US Pharmacopeial Convention, Inc. 2016: 4461.
9.	Salicylic Acid (Monograph). <i>United States Pharmacopeia XXXIX / National Formulary 34</i> . Rockville, MD. US Pharmacopeial Convention, Inc. 2016: 5779.
10.	USP <795>. <i>United States Pharmacopeia XXXIX / National Formulary 34</i> . Rockville, MD. US Pharmacopeial Convention, Inc. 2016: 617.

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