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Suggested Formula	Acetaminophen 100 mg/mL Oral Liquid (Suspension, 100 mL)	FIN	F 007 858v2
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SUGGESTED FORMULATION

Ingredient Listing	Qty.	Unit	NDC #	Supplier	Lot Number	Expiry Date
Acetaminophen, USP	10.000	g				
Stevia Powder	0.50	g				
Methylcellulose Gel (1%)	10.0	mL				
Methylcellulose Gel (1%)	q.s. to 100.0	mL				





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SPECIAL PREPARATORY CONSIDERATIONS

Ingredient-Specific Information

Light Sensitive (protect from light whenever possible): Acetaminophen, Methylcellulose Gel

Hygroscopic (protect from moisture whenever possible): Stevia Powder, Glycerin

Moisture Sensitive (protect from humidity whenever possible): Acetaminophen, Methylcellulose Gel

Heat Sensitive (protect from heat whenever possible): Acetaminophen

Suggested Preparatory Guidelines

Non-Sterile Preparation Sterile Preparation

Processing Error / Testing Considerations: 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: This formula may contain one or more Active Pharmaceutical Ingredients (APIs) that may be classified as hazardous, please refer & verify the current NIOSH list of Antineoplastic and Other Hazardous Drugs in Healthcare Settings, 2016. **General Chapter <800> Hazardous Drugs – Handling in Healthcare Settings** was formally published February 1, 2016 in the First Supplement to USP 39-NF 34 and has a delayed **official implementation date of December 31st, 2019**.

This formula must be prepared within the appropriate facilities under adequate environmental conditions, following the necessary guidelines and procedures as stated within *USP 795* and *USP 800*, when handling hazardous drugs. Only trained and qualified personnel must prepare this formula.

All required personal protective equipment (hazardous if applicable), such as but not limited to, lab coat, protective sleeves, gloves both inner and outer if applicable, dedicated shoe covers, hairnet, beard cover, eyewear, appropriate face mask, respirator and face shield, etc., where applicable must be worn at all times.

If applicable, follow all required procedures for hazardous drug handling including but not limited to procurement, transport, storage, preparation, dispensing, administration, clean up (spills) & disposal.

If you are a registered 503B facility, please refer to all relevant guidance documents including but not limited to the Code of Federal Regulations (CFR), Guidance for Industry (GFI) and Compliance Policy Guides (CPGs).

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
Acetaminophen, USP §	10.000	g			
Stevia Powder §	0.50	g			
Methylcellulose Gel (1%) §	10.0	mL			
Methylcellulose Gel (1%) §	q.s. to 100.0	mL			

* Takes into account increased batch size conversions and density conversions, if required.

§ Weigh / measure just prior to use.

Preparatory Instruction

1.	<p><u>Powder-liquid preparation:</u></p> <p>A. Combine and triturate the following ingredients together to form a fine, homogeneous powder blend:</p> <ul style="list-style-type: none"> -Acetaminophen -Stevia Powder <p>B. Levigate the fine, homogeneous powder blend (Step 1A) with the Methylcellulose Gel (1%) (10.0 mL <i>plus</i> processing error adjustments).</p> <p><u>End result:</u> Homogeneous paste-like dispersion.</p>
2.	<p><u>Filling to volume:</u></p> <p>A. Add additional Methylcellulose Gel (1%) to the homogeneous paste-like dispersion (Step 1B) to fill to the required batch size (100.0 mL <i>plus</i> processing error adjustments).</p> <p><u>Specifications:</u> Continuously mix until homogenous.</p> <p><u>End result:</u> Homogeneous liquid-like dispersion.</p>
3.	<p><u>Product transfer:</u></p> <p>A. Transfer the final product into the specified dispensing container (see “Packaging Requirements”).</p> <p><u>Note:</u> Continuously mix the final product during the transfer process in order to maintain homogeneity.</p>



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SUGGESTED PRESENTATION

Estimated Beyond-Use Date		Packaging Requirements		
	14 days, refrigerated, as per USP.		- Tightly closed, light resistant dispensing bottle. - To be administered with a metered-dose measuring device.	
Auxiliary Labels	1	Use as directed. Do not exceed prescribed dose.	6	Keep out of reach of children.
	2	Protect from light.	7	Consult your health care practitioner if any prescription or over-the-counter medications are currently being used or are prescribed for future use.
	3	Shake well before use.	8	Cap tightly after use.
	4	Do not take with alcohol, sleep aids, tranquilizers or other CNS depressants.	9	Keep in a dry place.
	5	Keep refrigerated. Do not freeze.		
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.			



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REFERENCES

1.	Suspensions. In: Allen, LV, Jr. <i>The Art, Science, and Technology of Pharmaceutical Compounding Fifth Edition</i> . American Pharmacists Association; 2016: 279.
2.	Methylcellulose. In: Rowe RC. <i>Handbook of Pharmaceutical Excipients, 7th Edition</i> . American Pharmaceutical Association; 2012: 496.
3.	Paracetamol. In: Sweetman SC, ed. <i>Martindale: The Complete Drug Reference, 36th Edition</i> . London, England: The Pharmaceutical Press; 2009: 108.
4.	Acetaminophen (Monograph). In: O'Neil MJ. <i>The Merck Index 15th Edition</i> . Whitehouse Station, NJ: Merck & Co, Inc.; 2013: Monograph #47.
5.	Acetaminophen. In: Trissel LA. <i>Trissel's Stability of Compounded Formulations, 5th Edition</i> . American Pharmaceutical Association; 2012: 2.
6.	Acetaminophen (Monograph). <i>United States Pharmacopeia XLI / National Formulary 36</i> . Rockville, MD. US Pharmacopeial Convention, Inc. 2018: 34.
7.	USP <795>. <i>United States Pharmacopeia XL / National Formulary 35</i> . Rockville, MD. US Pharmacopeial Convention, Inc. 2016: 675.

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