

Name: _____

Date: _____

Lab Day: Mon Tues Wed Thurs Friday

Time: AM PM

Compounded Non-Sterile Preparation - Powder

Required Pre-Lab Preparation

- Review this packet Dry Lab and Wet Lab Prescriptions/Calculations/Procedures
- PSK Lab Website Compounding Area
 - Compounding Terminology Definitions
 - Eutectic
 - Trituration
 - Compounding Lectures and Procedure Videos
 - Powders In-Class Procedure video
 - Powders Lecture podcast
 - Practice Compounding Prescriptions
 - Miconazole 2% and Zinc Oxide 10% Topical Dusting Powder
 - Complete Errors and Omissions Practice Prescription

INSTRUCTIONS

Prepare the attached wet lab compound prescriptions as outlined in the compounding procedure. Show all necessary calculations and document in detail all required information requested in the compounding record. Upon completion of the compound, generate a prescription label including any pertinent and necessary auxiliary labels. Once completed

1. Thoroughly clean your compounding equipment.
2. Return your cleaned equipment to its proper storage location.
3. Clean the surface of your work station thoroughly.
4. Place your completed lab packet along with your product at your work station.
5. Complete the error and omission prescription.
6. Summon an instructor for final check out.

Please note: Check out will not be performed until your equipment and work station have been thoroughly cleaned and equipment returned to its proper storage location.

LABORATORY SAFETY NOTICE PLEASE READ

1. In the compounding lab various active bulk pharmaceuticals, chemicals and commercial legend pharmaceuticals will be used during each compounding procedure. Should you have or suspect a sensitivity and/or allergy to any of the products being used as part of a particular procedure, including but not limited to sulfur, penicillin, topical anesthetics, etc., do not begin the procedure and notify an instructor.
2. Lab jackets and gloves must be worn at all times while in the compounding lab. Protective eyewear is available for use.
3. Some bulk pharmaceuticals and chemicals that exist as fine powders are easily aerosolized when opened. Use caution against inadvertent inhalation of these types of products. Filter masks are available for your use when working with these types of products.
4. Some compounding procedures require the use of a hot plate to heat certain components. Take your time and use extreme caution when working with heat to minimize the possibility of accidental burns.
5. All compounded products must remain in the compounding laboratory for proper destruction and disposal by an instructor.

Compounded Non-Sterile Preparation - Powder

QA and Check-Out Form

Compound #1 Dry Lab - Diaper Rash Powder

_____ Completed all dry lab calculations, procedure and compounding record documentation

Compound #2 Wet Lab - Foot Powder (Eutectic)

_____ Calculations

- Accurate, all requested information completed, all work shown

_____ Compounding Record/Documentation

- Requested documentation and procedural information completed in its entirety
- Correct beyond-use date (shortest exp. date/6 months) and storage requirements (room temperature, tight container)

_____ Label Drug Name and Auxiliary Labels

- Complete, accurate and appropriate
- MUST include Shake Well, External Use Only

_____ Final Product/Quality Control

- Fine whitish-gray powder
- Homogenous, free flowing, small particle size, free of clumps, aesthetic appearance
- Characteristic odor of methyl salicylate
- Correct final concentration based on calculations and procedure
- Actual weight = _____ (within 5% of theoretical)

Compound #3 Errors and Omissions Prescription Compound

_____ Corrected all calculation, procedure, documentation and label errors/omissions

Total Points = _____

Instructor comments:

<p>Date: X/XX/XXXX</p> <p>Patient Name: Rose Bontrager</p> <p>R_x</p> <p>ZnO</p> <p>Talc</p> <p>Corn Starch</p> <p>Ca Carbonate aa qs 20 g</p> <p>Nystatin 100,000 units/g - mix 1:10 with adsorbant powders</p> <p>M and Ft. Topical Diaper Rash Powder</p> <p>SIG: apply to affected area with each diaper change</p> <p>Refills: 3</p> <p>Dr. Harold Green</p>	<p>Powder Rx - Wet</p> <p>Additional Information:</p> <ul style="list-style-type: none"> • Use the Digital Balance • Least Weighable Quantity = 40 mg • Base calculations on 10% extra
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Formulation Record

Ingredient Identities & Amounts

Ingredient	Dose/Amt.	Activity	Purpose
Nystatin	10,000 U/g	antifungal	active
Zinc Oxide	22.5%	astringent/protectant	active
Talc	22.5%	drying agent/diluent	vehicle
Corn Starch	22.5%	drying agent/diluent	vehicle
Calcium Carbonate	22.5%	drying agent/diluent	vehicle

Compounding Calculations:

1. Required amounts of zinc oxide, talc, corn starch and calcium carbonate = _____ g of each powder.

2. Required amount of nystatin 100,000 units/g powder = _____ g

3. Amount of powder to dispense = _____

Calculations for the label

4. Percentage concentration = _____% of zinc oxide, talc, corn starch and calcium carbonate in final preparation.

Dilution: mass does not change, thus $M_1 = M_2$

5. Concentration of nystatin = _____ units/g in final preparation.

Dilution: mass does not change, thus $M_1 = M_2$

Compounding Record

Ingredient	Mft./Lot #	Exp Date	Target Amt	Actual Amt	QA Documentation
Zinc Oxide Powder, USP	PCCA/C103259	2/2023			Product Weights(s) or Volume:
Talc Powder	PCCA/C645234	6/2023			
Corn Starch Powder, USP	Baker/6532L08	9/2022			
Calcium Carbonate Powder, USP	PCCA/C654009	12/2023			Visual Inspection & Testing:
Nystatin Powder 100,000 units/g	Upsher Smith	12/2022			

<p>Formulation Record #: MFR-236794</p> <p>Compounding Record #: CMPD-893772</p> <p>Date & Time Prepared:</p> <p>Beyond-use Date:</p> <p>Reference Source for BUD: USP 795</p> <p>Container-Closure System:</p> <p>Storage Requirements:</p> <p>Final Product Name, Strength, and Dosage Form:</p> <p>Auxiliary Label(s):</p>	<p>Required Equipment & Procedure (step-by-step):</p> <p>REQUIRED EQUIPMENT - mortar, pestle, small metal spatula, rubber spatula, small/medium/large weigh boats, 2 ounce shaker bottle</p> <ol style="list-style-type: none"> 1. Weigh required amounts of: Zinc Oxide, talc, corn starch, calcium carbonate and nystatin 100,000 units/g powder <i>**Document exact weights of each ingredient in the compounding record**</i> 2. Geometrically combine the four adsorbent powders in a mortar and triturate until the powder mixture is uniform. Transfer to a large weigh boat. 3. Place the nystatin powder in the mortar and geometrically add the adsorbent powder mixture. Triturate after each addition until a uniform powder mixture is obtained and all the adsorbent powder has been added. 4. Transfer _____ g of the final preparation to a _____ shaker bottle. <i>**Document the size of shaker bottle used in your procedure**</i> 5. Discard excess powder appropriately. 6. Label and Dispense.
<p>Compounding Personnel Signature(s):</p>	

<p>Date: X/XX/XXXX</p> <p>Patient Name: Richard T. Hanson</p> <p>R_x</p> <p>Camphor 1%</p> <p>Menthol 2.5%</p> <p>Benzoic Acid 5%</p> <p>Methyl Salicylate qs</p> <p>Talc qs 15 g</p> <p>M and Ft. Topical Dusting Powder</p> <p>SIG: apply to both feet BID as directed</p> <p>Refills: 2</p> <p>Dr. George Platz</p>	<p>Powder Rx - Wet</p> <p>Additional Information:</p> <ul style="list-style-type: none"> • Use the Digital Balance • Least Weighable Quantity = 40 mg • Base calculations on 10% extra • Use 2-8 drops of methylsalicylate
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Formulation Record

Ingredient Identities & Amounts

Ingredient	Dose/Amt.	Activity	Purpose
Camphor	1%	analgesic	active
Menthol	2.5%	analgesic	active
Benzoic Acid	5%	antifungal	active
Methyl Salicylate	q.s.	scenting agent/diluent	vehicle
Talc	q.s.	drying agent/diluent	vehicle

Compounding Calculations:

1. Required amount of powder to dispense to the patient = _____ g

2. Required amount of powder to compound = _____ g

3. Required amount of camphor _____ g

4. Required amount of menthol = _____ g

5. Required amount of Benzoic Acid = _____ g

6. Required amount of Talc = _____ g

Compounding Record

Ingredient	Mft./Lot #	Exp Date	Target Amt	Actual Amt

QA Documentation
 Product Weights(s) or Volume:

 Visual Inspection & Testing:

<p>Formulation Record #: MFR-453685</p> <p>Compounding Record #: CMPD-237936</p> <p>Date & Time Prepared:</p> <p>Beyond-use Date:</p> <p>Reference Source for BUD: USP 795</p> <p>Container-Closure System:</p> <p>Storage Requirements:</p> <p>Final Product Name, Strength, and Dosage Form:</p> <p>Auxiliary Label(s):</p>	<p>Required Equipment & Procedure (step-by-step):</p> <p>REQUIRED EQUIPMENT - mortar, pestle, small metal, spatula, rubber spatula, small/medium/large weigh boats, 1 oz. shaker bottle</p> <ol style="list-style-type: none"> 1. Weigh required amounts of camphor, menthol, benzoic acid and talc. <i>**Document exact weights of each ingredient in the compounding record**</i> 2. Place the menthol and camphor in a mortar and triturate to force the eutectic. 3. Add the benzoic acid to the eutectic mixture and triturate until it is uniformly mixed. 4. Add _____ drops methyl salicylate drop-wise and triturate until uniform. <i>**Document the number of drops of Methyl Salicylate used here in the procedure and in the compounding record**</i> 5. Geometrically incorporate the talc into the eutectic/benzoic acid mixture. Triturate after each addition of talc until uniform. 6. Transfer _____ g of the final powder to a _____ shaker bottle. <i>**Document the amount dispensed and the size of shaker bottle used in your procedure**</i> 7. Discard excess powder appropriately. 8. Label and dispense.
<p>Compounding Personnel Signature(s):</p>	

Compounding Record

Ingredient	Mft./Lot #	Exp Date	Target Amt	Actual Amt
Benzocaine Powder, USP	PCCA/6409123	11 months	1.65 g	1.72 g
Salicylic Acid Powder, USP	PCCA/75AC987	8 months	1.98 g	2.02 g
Miconazole Powder	Gallipot/73540T	4 months	1.32 g	1.3 g
Talc Powder, USP	PCCA/7521098	10 months	55.05 g	55.43 g

QA Documentation
 Product Weights(s) or Volume:
 60.4 g
 Visual Inspection & Testing:
 white, odorless, fine,
 free-flowing powder

<p>Formulation Record #: MFR-983524</p> <p>Compounding Record #: CMPD-202311</p> <p>Date & Time Prepared: 1/25/20XX</p> <p>Beyond-use Date: 7/25/20XX</p> <p>Reference Source for BUD: USP 795</p> <p>Container-Closure System: 2 oz. shaker bottle</p> <p>Storage Requirements: Room Temperature</p> <p>Final Product Name, Strength, and Dosage Form: Benzocaine 2.5%/Salicylic Acid 3%/Miconazole 2% in Talc Topical Foot Powder</p> <p>Auxiliary Label(s): See Labels Above</p>	<p>Required Equipment & Procedure (step-by-step):</p> <p>REQUIRED EQUIPMENT - mortar, pestle, small metal spatula, rubber spatula, small/medium/large weigh boats, 2 oz. shaker bottle</p> <ol style="list-style-type: none"> 1. Weigh required amounts of benzocaine, salicylic acid, miconazole and talc. 2. Place the benzocaine, salicylic acid and miconazole in a mortar. Triturate until uniform. 3. Add all of the talc to the mortar and triturate until the product is uniformly mixed. 4. Transfer 60 g of powder to a shaker bottle. 5. Appropriately discard any excess product. 6. Label and Dispense.
<p>Compounding Personnel Signature(s): <i>Jaye Hawc, PharmD</i></p>	