

Name: _____

Date: _____

Lab Day: Mon Tues Wed Thurs Friday

Time: AM PM

Compounded Non-Sterile Preparation - Intro to Compounding

Required Pre-Lab Preparation

- PSK Lab Website Compounding Area
 - Weighing Tutorials
 - Digital Balance Tutorial
 - Compounding Terminology Definitions
 - Geometric Dilution
 - Compounding Calculation Examples
 - Active Ingredient from Crushed Tablet Powder (CTP)

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 - Intro to Compounding

QA and Check-Out Form

Compound #1 Drug A and B Powder

_____ Completed all calculations, procedure and compounding record documentation.

Compound #2 Drug C Suspension

_____ Completed all calculations, procedure and compounding record documentation.

_____ Partner verified weight of capsule powder = _____ mg

Total Points = _____

Instructor comments:

<p>Date: X/XX/XXXX</p> <p>Patient Name: Richard T. Hanson</p> <p>R_x</p> <p>Drug A 20 g</p> <p>Drug B 0.3 g</p> <p>M and Ft. Powder</p> <p>SIG: use as directed</p> <p>Refills: 2</p> <p>Dr. George Platz</p>	<p>Intro to Compounding Rx - Lab Activity One</p> <p>Additional Information:</p> <ul style="list-style-type: none"> • Use the Digital Balance • Least Weighable Quantity = 40 mg • Source of Drug A is USP grade bulk powder • Source of Drug B is commercially available 900 mg tablet
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Formulation Record

Ingredient Identities & Amounts

Ingredient	Dose/Amt.	Activity	Purpose
Drug A	q.s.	diluent	vehicle
Drug B	1.5%	anti-XXX	active

Compounding Calculations:

1. Required amount of Drug A = _____ g ***Record this target amount in the compounding record.***

2. Required amount of Drug B = _____ g

3. Required # of Drug B tablets to compound Rx = _____ tablets (Drug B is available as a 900 mg tablet.)
Record this target amount in the compounding record.

$$\frac{\text{Amount of Drug B required in Rx}}{\text{Amount of Drug B per tablet}} = \# \text{ of tablets (ROUND UP)}$$

4. Calculate the amount of Drug B tablet powder required for the prescription.

- Retrieve required # of Drug B tablets from the supply station.
- Tare the scale with a medium size weigh boat and place required # of Drug B tablets in the weigh boat.

Record the weight. _____ g

How much active drug is in required # of Drug B tablets? _____ g

Calculate the weight of crushed tablet powder that contains the required amount of Drug B.

$$\frac{\text{amt. Drug B in required \# of tabs}}{\text{weight of required \# of tabs}} = \frac{\text{amt. of Drug B required in Rx}}{x}$$

What weight of crushed tablet powder is needed for the prescription? _____ g ***Record this target amount in the compounding record.***

Compounding Record

Ingredient	Mft./Lot #	Exp Date	Target Amt	Actual Amt	QA Documentation
Drug A powder	PCCA/PD30592	11/20XX			Product Weights(s) or Volume:
Drug B 900 mg tablet	Mylan/YB129C	12/20XX			
Drug B tablet powder	---	---			
					Visual Inspection & Testing:

<p>Formulation Record #: MFR-155358</p> <p>Compounding Record #: CMPD-842276</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 and medium weigh boats</p> <ol style="list-style-type: none"> Place one Drug B 900 mg tablet in a clean mortar and triturate to a fine powder. Weigh the required amount of Drug B tablet powder in a small weigh boat a set aside. **Document exact weight of the tablet powder in the compounding record** Discard excess Drug B powder appropriately. **Place any excess powder remaining in the mortar into blue trash bins at the supply stations.** Weigh the required amount of Drug A in a medium size weigh boat. Place Drug B tablet powder into the mortar. Geometrically add Drug A to Drug B. Triturate until uniform after each addition of Drug A. <ol style="list-style-type: none"> Place approximately 1.5 g of Drug A in the mortar with Drug B tablet powder and triturate until uniform. Again place an equal amount of Drug A compared to what is in the mortar and triturate until uniform. Repeat this process until all of the Drug A powder has been added. <p>How many additions did it take to geometrically mix Drug A with Drug B? _____</p> Calculate $\pm 5\%$ of the total weight of powder to be dispensed. Total wt = 20 g + target wt of Drug B tablet powder Acceptable weight of the final powder must be between _____ g and _____ g Transfer the powder in the mortar to a tared medium weigh boat. **Record this weight and a description of the powder in the QA section of the compounding record.** Label and Dispense. Discard excess powder appropriately. **PLACE ONLY THE POWDER IN THE BLUE TRASH BINS. **DO NOT put weigh boats or paper towels in the blue trash bins. **Empty weigh boats go in regular trash containers. <p>Compounding Personnel Signature(s):</p>
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<p>Date: X/XX/XXXX</p> <p>Patient Name: Rose Bontrager</p> <p>R_x</p> <p>Drug C 2.5 mg/5 mL</p> <p>Orablend qs 70 mL</p> <p>M and Ft. Oral Suspension</p> <p>SIG: take as directed</p> <p>Refills: 0</p> <p>Dr. Harold Green</p>	<p>Intro to Compounding Rx - Lab Activity Two</p> <p>Additional Information:</p> <ul style="list-style-type: none"> • Use the Digital Balance • Least Weighable Quantity = 40 mg • Source of Drug C is commercially available 10 mg capsule
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Formulation Record

Ingredient Identities & Amounts

Ingredient	Dose/Amt.	Activity	Purpose
Drug C	2.5 mg/5 mL	anti-XXX	Active
Orablend	q.s.	suspending/flavoring	vehicle

Compounding Calculations:

1. Total required weight of Drug C for Rx = _____ mg

2. Required # of 10 mg Drug C capsules to compound Rx = _____ capsules. ***Record this target amount in the compounding record.***

$$\frac{\text{Amount of Drug C required in Rx}}{\text{Amount of Drug C per capsule}} = \# \text{ of capsules (ROUND UP)}$$

3. Calculate the amount of Drug C capsule powder required for the prescription.

- Retrieve required # of Drug C capsules from the supply station.
- Tare the scale with a medium size weigh boat.
- Open the required # of capsules and empty powder contents into the medium weigh boat previously tared.

Record the weight: _____ mg

How much active drug is in required # of Drug C capsules? _____ mg

Calculate the weight of capsule powder that contains the required amount of Drug C.

$$\frac{\text{amt. Drug C in required \# of caps}}{\text{powder weight of required \# of caps}} = \frac{\text{amt. of Drug C required in Rx}}{x}$$

What is the weight of capsule powder needed for the prescription? _____ mg ***Record this target amount in the compounding record.***

Compounding Record

Ingredient	Mft./Lot #	Exp Date	Target Amt	Actual Amt
Drug C 10 mg capsule	Aurobindo/G334	10/20XX		
Drug C capsule powder	--	--		

QA Documentation

Product Weights(s) or Volume:

Visual Inspection & Testing:

<p>Formulation Record #: MFR-655536</p> <p>Compounding Record #: CMPD-721025</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 - small metal spatula, small weigh boats</p> <ol style="list-style-type: none"> 1. Weigh the required amount of Drug C capsule powder. <i>**Document exact weight in the compounding record**</i> 2. Lab partner needs to verify your weight on their scale. 3. Partner verified weight of capsule powder = _____ mg 4. Calculate percent (%) error between weighings (see formula below). 5. Discard excess powder appropriately. <p>Percent (%) Error =</p> $\frac{(\text{Wt. on your scale}) - (\text{Wt. on partners scale})}{\text{Wt. on your scale}} * 100\%$
<p>Compounding Personnel Signature(s):</p>	