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|-------------------|--|-----|-----------|
| Suggested Formula | Omeprazole 10 mg/mL Oral Liquid (Suspension, 100 mL) | FIN | F 007 531 |
|-------------------|--|-----|-----------|

SUGGESTED FORMULATION

| Ingredient Listing | Qty. | Unit | NDC # | Supplier | Lot Number | Expiry Date |
|---|---------------|------|-------|----------|------------|-------------|
| Omeprazole (Powder), USP | 1.000 | g | | | | |
| Oral Mix Dry Alka, SF (Cherry Flavored) | 6.75 | g | | | | |
| Purified Water, USP | 60.0 | mL | | | | |
| Purified Water, USP | q.s. to 100.0 | mL | | | | |





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SPECIAL PREPARATORY CONSIDERATIONS

Ingredient-Specific Information

Light Sensitive (protect from light whenever possible): Omeprazole

Moisture Sensitive (protect from humidity whenever possible): Omeprazole

Oxygen Sensitive (protect from oxygen whenever possible): Omeprazole

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 |
|---|---------------|------|---------------------------------|------------------|-----------------|
| Omeprazole (Powder), USP § | 1.000 | g | | | |
| Oral Mix Dry Alka, SF (Cherry Flavored) | 6.75 | g | | | |
| Purified Water, USP | 60.0 | mL | | | |
| Purified Water, USP | 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 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"> -Omeprazole (Powder) -Oral Mix Dry Alka, SF (Cherry Flavored) |
| 2. | <p><u>Powder integration:</u></p> <p>A. Incrementally add the Purified Water (60.0 mL <i>plus</i> processing error adjustments) to the fine, homogeneous powder blend (Step 1A).</p> <p><u>Specifications:</u> Continuously mix, using high-shear mixing techniques until all the powder is well dispersed.</p> <p><u>End result:</u> Homogeneous liquid-like dispersion.</p> |
| 3. | <p><u>Filling to volume:</u></p> <p>A. Allow the suspension to settle for 30-60 seconds and then add additional Purified Water to the mixture (Step 2A) to fill to the required batch size (100.0 mL <i>plus</i> processing error adjustments).</p> <p><u>Specifications:</u> Continuously mix, using high-shear mixing techniques until the mixture is uniformly suspended.</p> <p><u>End result:</u> Homogeneous liquid-like dispersion.</p> |
| 4. | <p><u>Product transfer:</u></p> <p>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

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|--|---|--|---|--|
| Estimated Beyond-Use Date & Packaging Requirements | Amber PP bottles: 70 days at 4°C, based on available stability studies through Medisca. To be administered with a metered-dose measuring device.* | | | |
| | *Suggested BUD is based on the exact execution of the indicated ingredient list, quantities and procedures listed within this formulation. | | | |
| Auxiliary Labels | 1 | Use as directed. Do not exceed prescribed dose. | 6 | Protect from light. |
| | 2 | May impair mental and or physical ability. Use care when operating a car or machinery. | 7 | Consult your health care practitioner if any other prescription or over-the-counter medications are currently being used or are prescribed for future use. |
| | 3 | Shake well before use. | 8 | Keep out of reach of children. |
| | 4 | Do not take with alcohol, sleep aids, tranquilizers or other CNS depressants. | 9 | Cap tightly after use. |
| | 5 | Keep refrigerated. Do not freeze. | | |
| Pharmacist Instructions | Add any auxiliary labels specific to the active to the dispensing container as deemed necessary. | | | |
| Patient Instructions | Contact your pharmacist in the event of adverse reactions. | | | |



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REFERENCES

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| 1. | Suspensions. In: Allen, LV, Jr. <i>The Art, Science, and Technology of Pharmaceutical Compounding Fifth Edition</i> . American Pharmacists Association; 2016: 279. |
| 2. | Losec Capsules. In: Canadian Pharmacists Association. <i>Compendium of Pharmacists and Specialties, 2017</i> : 2071. |
| 3. | Omeprazole. In: Sweetman SC, ed. <i>Martindale: The Complete Drug Reference, 36th Edition</i> . London, England: The Pharmaceutical Press; 2009: 1753. |
| 4. | Omeprazole (Monograph). In: O'Neil MJ. <i>The Merck Index 15th Edition</i> . Whitehouse Station, NJ: Merck & Co, Inc.; 2013: Monograph #6939. |
| 5. | Omeprazole. In: Trissel LA. <i>Trissel's Stability of Compounded Formulations, 5th Edition</i> . American Pharmaceutical Association; 2012: 359. |
| 6. | Omeprazole (Monograph). <i>United States Pharmacopeia XL / National Formulary 35</i> . Rockville, MD. US Pharmacopeial Convention, Inc. 2017: 5433. |
| 7. | Omeprazole Systemic. Thomson Micromedex. <i>USP DI – Drug Information for the Health Care Professional, 26th Edition</i> . Taunton, MA: US Pharmacopeial Convention, Inc; 2006: 2253. |
| 8. | USP <795>. <i>United States Pharmacopeia XL / National Formulary 35</i> . Rockville, MD. US Pharmacopeial Convention, Inc. 2017: 675. |

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