

MEDISCA® NETWORK INC. TECHNICAL SUPPORT SERVICES FORMULATION CHEMISTRY DEPARTMENT TOLL-FREE: 866-333-7811

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

9/26/2012; Page 1

| Suggested Formula | Labetalol Hydrochloride 40 mg/mL Oral Liquid (Suspension, 100 mL) | FIN | F 001 131v3 |
|----------------------|---|-----|-------------|

SUGGESTED FORMULATION

| Ingredient Listing | Qty. | Unit | NDC # | Supplier | Lot Number | Expiry Date |
|---|---------------|------|-------|----------|---------------|----------------|
| Labetalol Hydrochloride, USP | 4.000 | g | | | | |
| Propylene Glycol, USP | 2.0 | mL | | | | |
| Tutti Frutti Flavor | 1.0 | mL | | | | |
| Medisca Oral Suspend (Suspending Vehicle) | 50.0 | mL | | | | |
| Medisca Oral Syrup (Flavored Vehicle) | q.s. to 100.0 | mL | (8) |) | | |

SPECIAL PREPARATORY CONSIDERATIONS

| Ingredient-Specific Information | | | | | | |
|--|--|---|--|--|--|--|
| Hygroscopic (protect from moi | sture whenever possible): | Propylene Glycol | | | | |
| Light Sensitive (protect from li | ght whenever possible): | Labetalol Hydrochloride, Propylene Glycol | | | | |
| Suggested Preparatory Guidelines | | | | | | |
| Non-Sterile Preparati | Non-Sterile Preparation | | | | | |
| <u>Processing Error /</u> <u>Testing Considerations</u> : | | considerations during preparation, it is suggested to the required quantities of ingredients. | | | | |
| Special Instruction: | Protective apparel, such as a lab c should always be worn. | coat, disposable gloves, eyewear and face-masks | | | | |
| | | f very small quantities of ingredients. All calculations be verified before dispensing the final product. | | | | |



MEDISCA® NETWORK INC. TECHNICAL SUPPORT SERVICES FORMULATION CHEMISTRY DEPARTMENT

TOLL-FREE: 866-333-7811 TELEPHONE: 514-905-5096 FAX: 514-905-5097 technicalservices@medisca.net

9/26/2012; Page 2

| Suggested Formula Labetalol Hydrochloride 40 mg/mL Oral Liquid (Suspension, 100 mL) | FIN | F 001 131v3 |
|---|-----|-------------|
|---|-----|-------------|

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 |
|---|---------------|------|---------------------------------------|---------------------|-----------------|
| Labetalol Hydrochloride, USP § | 4.000 | g | | | |
| Propylene Glycol, USP § | 2.0 | mL | | | |
| Tutti Frutti Flavor | 1.0 | mL | | | |
| Medisca Oral Suspend (Suspending Vehicle) | 50.0 | mL | | | |
| Medisca Oral Syrup (Flavored Vehicle) | q.s. to 100.0 | mL | , , , , , , , , , , , , , , , , , , , | | |

- § 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. Triturate the Labetalol Hydrochloride to form a fine, homogeneous powder.
- B. Combine and mix the following ingredients together to form a homogeneous liquid-like dispersion:
 - -Tutti Frutti Flavor
 - -Propylene Glycol
- C. Levigate the fine, homogeneous powder (Step 1A) with the homogeneous liquid-like dispersion (Step 1B).

End result: Homogeneous paste-like dispersion.

2. **Medium integration:**

A. Incrementally add the homogeneous paste-like dispersion (Step 1C) to the Oral Suspend (Suspending Vehicle).

Specifications: Vigorously mix.

End result: Homogeneous liquid-like dispersion.



MEDISCA® NETWORK INC. TECHNICAL SUPPORT SERVICES FORMULATION CHEMISTRY DEPARTMENT TOLL-FREE: 866-333-7811

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

9/26/2012; Page 3

| Suggested Formula | Labetalol Hydrochloride 40 mg/mL Oral Liquid (Suspension, 100 mL) | FIN | F 001 131v3 |
|----------------------|---|-----|-------------|
| 1 Offitura | | | |

3. **Filling to volume:**

A. Add Oral Syrup (Flavored Vehicle) to the mixture (Step 2A) to fill to the required batch size (100.0 mL *plus* processing error adjustments).

Specifications: Vigorously mix.

End result: Homogeneous liquid-like dispersion.

4. **Product transfer:**

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

<u>Note</u>: Continuously mix the final product during the transfer process into the recommended dispensing containers in order to maintain homogeneity.

SUGGESTED PRESENTATION

| Estimated Beyond-Use Date | | 14 days, refrigerated, as per Packa Requiren | | Tightly closed, light-resistant dispensing bottle. To be administered with a metered dosemeasuring device. | |
|------------------------------|---|--|---|---|--|
| | 1 | Use as directed. Do not exceed prescribed dose. | 6 | Cap tightly after use. | |
| | 2 | Keep out of reach of children. | 7 | Shake well before use. | |
| Auxiliary Labels | 3 | Consult your health care practitioner if any other prescription or over-the-counter medications are currently being used or are prescribed for future use. | 8 | Keep refrigerated. Do not freeze. | |
| | 4 | Do not take with alcohol, sleep aids, tranquilizers or other CNS depressants. | 9 | Protect from light. | |
| | 5 | May impair mental and/or physical ability. Use care when operating a car or machinery. | | | |
| 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 | | | | |



MEDISCA® NETWORK INC. TECHNICAL SUPPORT SERVICES FORMULATION CHEMISTRY DEPARTMENT

TOLL-FREE: 866-333-7811 TELEPHONE: 514-905-5096 FAX: 514-905-5097 technicalservices@medisca.net

9/26/2012; Page 4

| | T | | |
|----------------------|---|-----|-------------|
| Suggested Formula | Labetalol Hydrochloride 40 mg/mL Oral Liquid (Suspension, 100 mL) | FIN | F 001 131v3 |

REFERENCES

| 1. | Solutions. In: Allen, LV, Jr. <i>The Art, Science and Technology of Pharmaceutical Compounding</i> . American Pharmaceutical Association; 1998: 157. |
|----|--|
| 2. | Trandate. In: Canadian Pharmacists Association. Compendium of Pharmacists and Specialties, 2005. 2128. |
| 3. | Propylene Glycol. In: Rowe RC. <i>Handbook of Pharmaceutical Excipients</i> , 4 th Edition. American Pharmaceutical Association; 2003: 521. |
| 4. | Labetalol Hydrochloride. In: Sweetman SC, ed. <i>Martindale: The Complete Drug Reference, 34th Edition.</i> London, England: The Pharmaceutical Press; 2005: 943 |
| 5. | Labetalol Hydrochloride (Monograph). In: O'Neil MJ. <i>The Merck Index 13th Edition</i> . Whitehouse Station, NJ: Merck & Co, Inc.; 2001: 954. |
| 6. | Labetalol Hydrochloride. In: Trissel LA. <i>Trissel's Stability of Compounded Formulations, 2nd Edition.</i> American Pharmaceutical Association; 2000: 209. |
| 7. | Labetalol Hydrochloride (Monograph). US Pharmacopeial Convention, Inc. <i>United States Pharmacopeia XXV / National Formulary 20.</i> Rockville, MD: US Pharmacopeial Convention, Inc; 2001: 981 |
| 8. | USP <795>. US Pharmacopeial Convention, Inc. <i>United States Pharmacopeia XXV / National Formulary 20</i> . Rockville, MD: US Pharmacopeial Convention, Inc; 2001: 2053. |
| | |

DISCLAIMER: MEDISCA NETWORK INC., HEREBY REFERRED TO AS 'THE NETWORK', HAS PROVIDED THE FORMULA AND INSTRUCTIONS ABOVE AS A MODEL FOR EDUCATIONAL PURPOSES ONLY ON THE BASIS OF THE RECOGNIZED COMPENDIA AND TEXTS REFERENCED AT THE END OF THIS DOCUMENT. THE NETWORK TAKES NO RESPONSIBILITY FOR THE VALIDITY OR ACCURACY OF THIS INFORMATION OR FOR ITS SAFETY OR EFFECTIVENESS, NOR FOR ANY USE THEREOF, WHICH IS AT THE SOLE RISK OF THE LICENSED PHARMACIST. ADJUSTMENTS MAY BE NEEDED TO MEET SPECIFIC PATIENT NEEDS AND IN ACCORDANCE WITH A LICENSED PRESCRIBER'S PRESCRIPTION. THE PHARMACIST MUST EMPLOY APPROPRIATE TESTS TO DETERMINE THE STABILITY OF THIS SUGGESTED FORMULA. THE NETWORK CANNOT BE HELD LIABLE TO ANY PERSON OR ENTITY CONCERNING CLAIMS, LOSS, OR DAMAGE CAUSED BY, OR ALLEGED TO BE CAUSED BY, DIRECTLY OR INDIRECTLY, THE USE OR MISUSE OF THE INFORMATION CONTAINED IN THIS SUGGESTED FORMULA. IN ALL CASES IT IS THE RESPONSIBILITY OF THE LICENSED PHARMACIST TO KNOW THE LAW, TO COMPOUND ANY FINISHED PRODUCT AND TO DISPENSE THESE PRODUCTS IN ACCORDANCE WITH FEDERAL AND STATE LAW.