

MEDISCA® NETWORK INC. TECHNICAL SUPPORT SERVICES FORMULATION CHEMISTRY DEPARTMENT TOLL-FREE: 866-333-7811 TELEPHONE: 514-905-5096

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

4/22/2009; page 1 TMP 045

Suggested Fentanyl 10 μg/mL Epidural Injection (Solution, 30 mL)	FIN	F 003 731	
--	-----	-----------	--

SUGGESTED FORMULATION

Ingredient Listing	Qty.	Unit	NDC #	Supplier	Lot Number	Expiry Date
Fentanyl 50 µg/mL Injection (Sterile, Preservative Free) **	6.00	mL				
Sodium Chloride 0.9% for Injection, USP (Sterile, Preservative Free)	24.0	mL				

^{**}Delivered as Fentanyl Citrate

SPECIAL PREPARATORY CONSIDERATIONS

ECIAL PREPARATORY CONSI	DERATIONS
<u>Ingredient-Specific Information</u>	
Controlled substance (adhere documentation procedures)	to proper handling and Fentanyl Citrate
Light sensitive (protect from li	ght whenever possible): Fentanyl Citrate
Suggested Preparatory Guidelines	
Non-Sterile Preparat	ion Sterile Preparation
Processing Error / Testing Considerations:	To account for processing error, sterility and endotoxin testing considerations during preparation, it is suggested to measure an additional 5 to 9% of the required quantities of ingredients.
Special Instruction:	This formula must be prepared within the appropriate facilities under adequate environmental conditions, following the necessary guidelines and procedures as stated within <i>USP 797</i> . Only trained and qualified personnel must prepare this formula.
	All heat stable, reusable materials and equipment must be sterilized and depyrogenated by dry heat sterilization at 250°C for 2 hours prior to use.
	Every batch of final product compounded using this procedure must be sterility and endotoxin tested before being dispensed.
	Protective apparel, such as a sterile gown, sterile gloves, shoe covers, head cap, eyewear and face-masks should always be worn. In addition, proper personnel cleansing must be done before entering the buffer or clean area.
	Filter integrity must be validated by performing a filter stress test. If the test demonstrates that the filter might be defective, the solution must be discarded and remade.
	This procedure requires the use of very small quantities of ingredients. All calculations and preparation techniques must 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

4/22/2009; page 2

Suggested
Buggesieu
Formula
1 Ormula

Fentanyl 10 µg/mL Epidural Injection (Solution, 30 mL)

FIN

F 003 731

SUGGESTED PREPARATION (for 30 mL)

Weigh and / or measure the following ingredients when appropriate:

Ingredient Listing	Qty.	Unit	Multiplication factor (*):	Processing Error	Qty. to measure
Fentanyl 50 μg/mL Injection (Sterile, Preservative Free) §	6.00	mL			
Sodium Chloride 0.9% for Injection, USP (Sterile, Preservative Free) §	24.0	mL	8		

- * Takes into account increased batch size conversions and density conversions, if required.
- § Weigh / measure just prior to use.

IMPORTANT: All preparatory procedures must be performed using proper Aseptic Technique

1. **Equipment sterilization:**

Following the manufacturer's specifications, sterilize and depyrogenate all heat stable, reusable materials and equipment, then return to ambient temperature.

2. **Medium integration:**

<u>Note</u>: All manipulations must be done under a laminar airflow hood. Disinfect the commercial vials with Alcohol 70% prior to withdrawing the required amount of liquid.

A. Incrementally add the Fentanyl 50 μg/mL Injection (Sterile, Preservative Free) to the Sodium Chloride 0.9% for Injection (Sterile, Preservative Free):

Specifications: Continuously mix.

End result: Homogeneous liquid-like solution.

3. Filtering and transferring:

Aseptically filter the solution through a 0.22-µm sterile filter into the recommended dispensing container (see Packaging requirements). Transfer the remainder into a separate dispensing container. This is to be used as the Test sample for sterility and endotoxin testing.

4. **Sterility testing:**

Validate the Test sample for sterility and endotoxins, in accordance to current USP 797 regulatory guidelines.



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

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

4/22/2009; page 3 TMP 045

Suggested Formula Fentanyl 10 μg/mL Epidural Injection (Solution, 30 mL) FIN F 003 731

SUGGESTED PRESENTATION

JGGESTED P	RES	SEN	NTATION			
Estimated BUD based on a s		14 days, refrigerated. BUD based on a successful sterility and endotoxin test result.	Packaging Requirements		Sterile, tight, light-resistant unit dose injection vials.	
Use as directed. Do not exceed prescribed dose.		8	For medical office use only.			
		2	Keep out of reach of children.	Keep out of reach of children.		Protect from light.
		3	Keep refrigerated. Do not freeze.		10	Controlled substance. Dangerous unless used as directed.
A:11: a.m.		4	Do not take with alcohol, sleep aids, tranquilizers or other CNS depressants.			May produce psychological and/or physical dependence.
Auxiliary Labels	ls	5	May impair mental and/or physic Use care when operating a car or machinery.		12	Do not used if product changes color.
		6	Consult your health care practition of over-the-comedications are currently being prescribed for future use.	unter	13	Preservative free solution, single use only. Discard any unused portion.
		7	Discard container after use.	7	14	Discard in the presence of particulate matter.
Pharmacist Instructions Add any auxiliary labels specific to the active ingredients to the dispensing container as deemed necessary.						
	IMPORTANT: TO BE ADMINISTERED ONLY BY THE PRESCRIBING PHYSICIAN.					
Patier Instruction	(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

4/22/2009; page 4

Suggested Formula	Fentanyl 10 μg/mL Epidural Injection (Solution, 30 mL)	FIN	F 003 731
----------------------	--	-----	-----------

REFERENCES

1.	USP <797>. <i>United States Pharmacopeia XXXI / National Formulary 26.</i> Rockville, MD. US Pharmacopeial Convention, Inc. 2008.
2.	Parenteral Preparations. In: Allen, LV, Jr. <i>The Art, Science and Technology of Pharmaceutical Compounding Third Edition</i> . American Pharmaceutical Association; 2008: 313.
3.	Fentanyl Citrate. In: Sweetman SC, ed. <i>Martindale: The Complete Drug Reference</i> , 34 th Edition. London, England: The Pharmaceutical Press; 2005: 40.
4.	Fentanyl (Monograph). In: O'Neil MJ. <i>The Merck Index 14th Edition</i> . Whitehouse Station, NJ: Merck & Co, Inc.; 2006: Monograph #4001.
5.	Fentanyl Citrate. In: Trissel LA. <i>Trissel's Stability of Compounded Formulations</i> , 3 rd Edition. American Pharmaceutical Association; 2005: 172.
6.	Fentanyl Citrate (Monograph). <i>United States Pharmacopeia XXXI / National Formulary 26</i> . Rockville, MD. US Pharmacopeial Convention, Inc. 2008.
7.	Fentanyl Systemic. Thomson Micromedex. <i>USP DI – Drug Information for the Health Care Professional</i> , 26 th Edition. Taunton, MA: US Pharmacopeial Convention, Inc; 2006: 1452.
•	

DISCLAIMER: MEDISCA NETWORK INC. & RÉSEAU MEDISCA NETWORK INC., HEREBY REFERRED TO AS 'THE NETWORK', HAVE 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.