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Suggested Formula	Etomidate 2 mg/mL Intravenous Injection (Solution, 10 mL)	FIN	F 008 668	
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### SUGGESTED FORMULATION

Ingredient Listing	Qty.	Unit	NDC #	Supplier	Lot Number	Expiry Date
Etomidate 1% Stock Solution †	2.00	mL				
Propylene Glycol, USP	1.50	mL				
Sterile Water For Irrigation, USP	6.0	mL				
Sterile Water For Irrigation, USP	q.s. to 10.0	mL				
† Etomidate 1% Stock Solution						
Etomidate, USP	0.100	g		. 1		
Propylene Glycol, USP	9.0	mL		Y		
Propylene Glycol, USP	q.s. to 10.0	mL				

### SPECIAL PREPARATORY CONSIDERATIONS

Ingredient-Specific Information

Light Sensitive (protect from light whenever possible): Etomidate, Propylene Glycol

*Hygroscopic* (protect from moisture whenever possible): Propylene Glycol



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# SPECIAL PREPARATORY CONSIDERATIONS (CONTINUED)

## Suggested Preparatory Guidelines

<u>Processing Error /</u> Testing Considerations:	To account for processing error, sterility and endotoxin testing considerations due preparation, it is suggested to measure an additional <b>15 to 20%</b> of the required quantities of ingredients.
Special Instruction:	This formula may contain one or more Active Pharmaceutical Ingredients (APIs) th may be classified as hazardous, please refer & verify the current NIOSH list of Antineoplastic and Other Hazardous Drugs in Healthcare Settings. At this time, <b>General Chapter &lt;800&gt; Hazardous Drugs – Handling in Healthcare Settings</b> is informational and not compendially applicable unless otherwise specified by regula and enforcement bodies. For information on the scope, intended applicability, and implementation context for USP General Chapter <800>, see: <u>https://www.usp.org/compounding/general-chapter-hazardous-drugs-handling- healthcare</u> .
	This formula must be prepared within the appropriate facilities under adequate environmental conditions, following the necessary guidelines and procedures as stat within <i>USP 797</i> and <i>USP 800</i> , when handling hazardous drugs. Only trained and qualified personnel must prepare this formula.
	All heat stable, reusable materials and equipment must be sterilized and depyrogena 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.
	All required personal protective equipment (sterile and hazardous if applicable), suc as but not limited to, gowns, aprons, sleeves, gloves both inner and outer if applicable shoe covers, hairnet, head cap, beard cover, eyewear, appropriate face mask, respira and face shield, etc., where applicable must be worn at all times. In addition, proper personnel cleansing must be done before entering the buffer or clean area.
	If applicable, follow all required procedures for hazardous drug handling including not limited to procurement, transport, storage, preparation, dispensing, administration clean up (spills) & disposal.
	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.
	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 (GFIs) and Compliance Policy Guides (CPGs).
	This procedure requires the use of very small quantities of ingredients. All calculate and preparation techniques must be verified before dispensing the final product.



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## SUGGESTED PREPARATION (for 10 mL)

Weigh and / or measure the following ingredients when appropriate:

Ingredient Listing	Qty.	Unit	Multiplication factor <sup>(*)</sup> :	Processing Error	Qty. to measure
Etomidate 1% Stock Solution † §	2.00	mL			
Propylene Glycol, USP §	1.50	mL			
Sterile Water For Irrigation, USP §	6.0	mL	œ		
Sterile Water For Irrigation, USP §	q.s. to 10.0	mL			
tomidate 1% Stock Solution		5	8		
Etomidate, USP §	0.100	g	O		
Propylene Glycol, USP §	9.0	mĹ			
Propylene Glycol, USP §	q.s. to 10.0	mL			

\* Takes into account increased batch size conversions and density conversions, if required.

§ Weigh / measure just prior to use.

### **Preparatory Instruction**

	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.	† Etomidate 1% Stock Solution preparation:
	A. Incrementally add the Etomidate (0.100 g) to the Propylene Glycol (9.0 mL).
	Specifications: Continuously mix until all solid particles have completely dissolved.
	End result: Homogeneous liquid-like solution.
	B. Add additional Propylene Glycol to the mixture (Step 2A) to fill to the required batch size (10.0 mL).
	Specifications: Continuously mix.
	End result: Homogeneous liquid-like solution.



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3.	Medium integration:						
	A. In the given order, sequentially add the following ingredients to the Sterile Water For Irrigation (6.0 mL plus processing error adjustments):						
	-Etomidate 1% Stock Solution (2.00 mL plus processing error adjustments) -Propylene Glycol (1.5 mL plus processing error adjustments)						
	Specifications: Continuously mix.						
	End result: Homogeneous liquid-like solution.						
4.	Filling to volume:						
	A. Add additional Sterile Water for Irrigation to the above mixture to fill to the required batch processing error adjustments).	ı size	(10.0 mL <i>plus</i>				
	Specifications: Continuously mix until homogenous.						
	End result: Homogeneous liquid-like solution.						
	B. Test the pH, it should lie between 4.0 to 7.0.						
5.	Filtering and transferring:						
	Aseptically filter the solution through a $0.22$ - $\mu$ m sterile filter into the recommended dispensing Packaging requirements). Transfer the remainder into a separate dispensing container. This is to sample for sterility and endotoxin testing.						
6.	Filter integrity test:						
	Validate filter integrity by performing a filter stress test. If the test demonstrates that the filter n solution must be discarded and remade.	night	be defective, the				
7.	Terminal Sterilization:						
	In relation to the chemical composition of the formulation, final packaging, etc., select and value sterilization method and follow the manufacturer's specifications.	date :	an end-stage				
8.	Sterility testing:						
	Validate the test sample for sterility and endotoxins, in accordance to current USP 797 regulato	ory gu	idelines.				



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# SUGGESTED PRESENTATION

Estimated Beyond-Use Date		14 days, refrigerated, as per USP 797. BUD based on a successful sterility and endotoxin test result.	Packaging Requirement		Sterile, tightly closed, light-resistant unit-dose injection vials.
	1	Use as directed. Do not exceed dose.	prescribed	7	Consult your health care practitioner if any prescription or over-the-counter medications are currently being used or are prescribed for future use.
	2	Keep out of reach of children.		8	Do not use if discolored.
Auxiliary	3	Hypertonic solution, inject slowly		9	Protect from light.
Labers	Labels 4 Equilibrate to		efore use.	10	Discard in the presence of particulate matter.
	5	Keep refrigerated. Do not freeze.		11	Do not take with alcohol, sleep aids, tranquilizers or other CNS depressants.
	6 May impair mental and/or Use care when operating a			12	For intravenous use only.
Pharmacist Instructions					
Patient Instructions	Contact your pharmacist in the event of adverse reactions				



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### REFERENCES

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1.	Parenteral Preparations. In: Allen, LV, Jr. <i>The Art, Science, and Technology of Pharmaceutical Compounding Fifth Edition</i> . American Pharmacists Association; 2016: 399.
2.	Etomidate. In: Sweetman SC, ed. Martindale: The Complete Drug Reference, 38th Edition. London, England: The Pharmaceutical Press; 2014: 1901.
3.	Etomidate (Monograph). United States Pharmacopeia XLII / National Formulary 37. Rockville, MD. US Pharmacopeial Convention, Inc. 2019: 1752.
4.	USP <797>. United States Pharmacopeia XLII / National Formulary 37. Rockville, MD. US Pharmacopeial Convention, Inc. 2019: 6959.

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