



# NATIONWIDE CHILDREN'S

*When your child needs a hospital, everything matters.™*

## Pharmacy

Drug Name	Route	Dosage Form	Concentration
<b>LET II 3ML</b>	<b>Topical</b>	<b>Gel</b>	<b>Lidocaine 4% Epinephrine 0.05%: Tetracaine 0.5%</b>

<b>Formula Qty: 350mL</b>	<b>Shelf Life: 150 days</b>
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### Equipment needed:

Laminar air flow hood, 250mL beaker, GLASS mortar, GLASS stirring rod, 60mL sterile syringe, 0.2 micron filter, AMBER plastic 5mL oral syringes, tamper-resistant seals, plastic bag

**Auxiliary Labels/Storage: Refrigerate; Not for Mucous Membranes; Protect From Light**  
Room Temperature Storage=21 days.

### Directions:

1. Clean beaker, mortar, pestle, and stirring rod with hot water. Rinse with sterile water for irrigation and dry thoroughly. Clean with isopropyl 70% alcohol.
2. Weight out tetracaine, sodium bisulfite, lidocaine HCl, and epinephrine bitartrate powders and place in beaker.
3. In laminar air flow hood, add sterile water for injection to beaker. Stir to dissolve.
4. Withdraw solution into a 60mL syringe and attach 0.2micron filter.
5. Transfer lidocaine jelly into mortar and break up large bubbles with stirring rod.
6. SLOWLY and geometrically, inject filtered solution into the jelly. Stir in a figure-eight pattern with the glass rod to avoid air bubbles. If needed, allow to sit in hood until air bubbles rise to surface.
7. Draw dose of 3mL into AMBER plastic 5mL oral syringes by placing just the tip in the gel. Clean tip with alcohol and cap. Label and place tamper resistant seal over cap.
8. Bag syringes in sets of 10 in a plastic bag. Total yield is 110-115 syringes.

**Note:** If AMBER syringes are unavailable, place each clear syringe in an AMBER bag.

**Equivalencies:** 1.8mg Epinephrine Bitartrate = 1mg Epinephrine  
Lidocaine 4% includes Lidocaine HCl and Lidocaine in jelly

**Final Product Description:** colorless, slightly milky gel with no air bubbles.

Ingredient Name/Strength/Form/Manuf	QS	Quantity	Units
Epinephrine Bitartrate USP		0.32	Gram
Lidocaine Hydrochloride USP		8	Gram
Lidocaine Jelly 2% (30mL tube)		300	mL
Sodium Bisulfite FCC		0.26	Gram
Sterile water for injection		50	mL
Tetracaine USP (FREE BASE)		1.75	gram
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## Pharmacy

### Citations/References

1. Nationwide Children's Hospital, Children's Hospital of Philadelphia, University of Kansas Medical Center Experience. 2002.

2. Schilling CG, et al. Tetracaine, epinephrine, and cocaine (TAC) versus Lidocaine, epinephrine, and tetracaine (LET) for anesthesia of lacerations in children. *Ann Emergency Medicine*. 1995; (25):203-208.

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