Rx

STANFORD #5 ORAL LIQUID

For 500 mL

Nystatin		0.945 g
Triamcinolone acetonide, micronized		0.5 g
Chlorpheniramine maleate		0.1 g
Tetracycline hydrochloride		6 g
Deoxy-D-glucose		0.5 g
Simethicone		10 mL
Flavor, cherry concentrate		15 mL
Water, distilled		25 mL
Master Suspension formula	qs	500 mL

Note: This formula is for nystatin assayed at 5000 U/mg. If the assay is different, then the amount of nystatin used must be adjusted.

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Weigh the powders listed above and triturate in a mortar.
4. Add the distilled water in small amounts to the mortar containing the above-listed powders and mix until a smooth suspension results.
5. Add the simethicone and mix well.
6. Transfer the mixture to a large beaker.
7. Add the flavor and bring to final volume by adding the Master Suspension formula.

PACKAGING

Dispense in an amber-colored prescription bottle and attach a "Refrigerate" label.

LABELING

Swish and swallow 1 tsp 4 times daily.

STABILITY

A beyond-use date of 14 days can be assigned to this preparation.

STORAGE

Refrigerate.

USE

Used to heal mouth lesions and aphthous ulcers; also has an analgesic effect on those wounds.

QUALITY CONTROL

Use organoleptic methods including sight, taste, and smell.

Rx

MASTER SUSPENSION FORMULA

For 100 mL

Xanthan gum		0.2 g
Sodium benzoate		0.1 g
Sodium saccharin		0.5 g
Citric acid anhydrous		0.1 g
Stevioside powder extract		0.2 g
Water, bacteriostatic paraben preserved	qs	100 mL
Sodium hydroxide 20% solution	qs	Dropwise, until the needed pH is reached

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Dissolve the sodium benzoate, sodium saccharin, citric acid, and stevioside powder extract in 90% of the total volume of the bacteriostatic preserved water.
4. Add the xanthan gum gradually so that the mixture does not clump.
5. Mix with a spin bar and stir until the suspension is uniform. *Note: The suspension should be left mixing for 24 hours to ensure complete hydration.*
6. Use the bacteriostatic paraben preserved water (provided with this series of formulations) to bring the suspension to volume.
7. Add the 20% sodium hydroxide, dropwise, to adjust the pH to a range of 4.5 to 5.0.

PACKAGING

Store in an amber-colored prescription bottle and place in the refrigerator.

LABELING

Shake well and refrigerate.

STABILITY

A beyond-use date of 30 days can be assigned to this preparation.

STORAGE

Store in the refrigerator.

USE

Pharmaceutical necessity.

QUALITY CONTROL

Use organoleptic methods including sight, smell, and taste.

Rx

BACTERIOSTATIC PARABEN PRESERVED WATER

For 100 mL

Methylparaben		0.0525 g
Propylparaben		0.0263 g
Water, purified	qs	100 mL

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Heat the purified water to 70°C to 90°C.
4. Using 90% of total volume of water, add the methylparaben and propylparaben powders gradually, with stirring, until those powders have completely dissolved.
5. Let the resultant mixture cool and then use the purified water to adjust the mixture to the volume required.

PACKAGING

Store in an amber-colored prescription bottle.

LABELING

Bacteriostatic paraben preserved water for formulations where "paraben preserved water" is called for.

STABILITY

A beyond-use date of 30 days can be assigned to this preparation.

STORAGE

Store at room temperature.

USE

Pharmaceutical necessity.

QUALITY CONTROL

Use organoleptic methods including sight, taste, and smell.

Rx

SODIUM HYDROXIDE 20% SOLUTION

For 100 mL

Sodium hydroxide pellets		20 g
Water, sterile for irrigation	qs	100 mL

Note: Solutions of alkali hydroxides absorb carbon dioxide when they are exposed to air. Such solutions should be freshly prepared each time. Carbon dioxide-free water can be prepared as follows: Boil purified water or water for irrigation for 20 minutes, transfer to an air-tight glass bottle, and allow to cool.

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Gradually add 20 g of sodium hydroxide to 80 mL of water for irrigation with mixing.
4. Add the sterile water for irrigation to produce the total volume required.

PACKAGING

Store in an amber-colored glass dropper bottle.

LABELING

Caustic/corrosive liquid; do not swallow or allow contact with skin. Immediately use water to wash this preparation off the skin if contact accidentally occurs. It is best to use this compound immediately. Discard this preparation after 24 hours.

STABILITY

A beyond use-date of 24 hours can be assigned to this preparation.

STORAGE

Store at room temperature.

USE

Pharmaceutical necessity.

QUALITY CONTROL

Use organoleptic methods including sight and careful smelling.

Rx

MORPHINE SULFATE 1% EMOLLIENT CREAM

For 100 g

Morphine sulfate		1 g
Glycerin		2 mL
Base, emollient cream	qs	100 g

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Make a paste of the morphine powder and glycerin.
4. Add, in geometric proportions, the emollient cream base to the paste made in step 1.

PACKAGING

Dispense in an ointment tube or a syringe.

LABELING

Two to 4 times daily, irrigate the wound to clean it and then apply either 1 mL of the cream or enough cream to cover the wounded area.

STABILITY

A beyond-use date of 30 days can be assigned to this preparation.

STORAGE

Store at room temperature.

USE

Used to alleviate local pain caused by bedsores, pressure sores, or decubitus ulcers.

QUALITY CONTROL

Organoleptic methods including sight and smell; morphine analysis.

Rx

KETAMINE 10%, GABAPENTIN 6%, CLONIDINE 0.2%, LIDOCAINE 2% IN PLURONIC LECITHIN ORGANOGEL GEL

For 100 g

Clonidine hydrochloride		0.22 g
Ketamine hydrochloride		11.5 g
Gabapentin		6 g
Lidocaine		2 g
Ethoxydiglycol		10 mL
Lecithin:isopropyl palmitate solution		22 mL
Pluronic F-127 (poloxamer 407) 30% gel	qs	50 mL

Note: One milligram of ketamine activity equals 1.15 mg of ketamine hydrochloride, and 1 mg of clonidine activity equals 1.1 mg of clonidine hydrochloride.

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Triturate the clonidine hydrochloride, gabapentin, lidocaine, and ketamine hydrochloride together.
4. Add the ethoxydiglycol to the powders and mix to wet.
5. Add the product of step 4 to the lecithin:isopropyl palmitate mixture and mix well.
6. Add the Pluronic 30% gel (a qs amount) in small increments to bring to volume.
7. Pass the resultant mixture through an ointment mill.

PACKAGING

Dispense in 60-mL syringes.

LABELING

Apply to the affected area to produce a local effect or to the spinal area of the affected nerves to produce a systemic effect every 4 hours to treat neuropathic pain.

STABILITY

A beyond-use date of 30 days can be assigned to this preparation.

STORAGE

Store at room temperature.

USE

Used primarily as an adjuvant to treat neuropathic pain.

QUALITY CONTROL

Use organoleptic methods including sight and smell.

Rx

KETAMINE 40-MG/5-ML SOLUTION

For 100 mL

Ketamine hydrochloride		0.92 g
Glycerin		25 mL
Stevia concentrate (500 mg/mL)		0.2 mL
Flavor, bitterness suppressing		1 mL
Flavor, chocolate		1 mL
Flavor, raspberry		3 mL
Flavor, peppermint oil		1 gtt
Sorbitol solution		25 mL
Water, bacteriostatic preserved	qs	100 mL

Note: One milligram of ketamine equals 1.15 mg ketamine hydrochloride.

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Dissolve the ketamine hydrochloride in 25% of the total volume of bacteriostatic paraben preserved water.
4. Add all the flavors and sweeteners. *Note: The patient's preferences for other flavors can be accommodated.*
5. Add the glycerin.
6. Bring to volume by adding the sorbitol.

PACKAGING

Dispense in an amber-colored oval prescription bottle.

LABELING

Dose 2.5 to 5 mL every 4 to 6 hours, depending on the patient's need.

STABILITY

A beyond-use date of 14 days can be assigned to this preparation.

STORAGE

Store at room temperature.

USE

Nominally used as an anesthetic but is also useful in treating local and systemic neuropathic pain and depression.

QUALITY CONTROL

Use organoleptic methods including, sight, smell, and taste; ketamine analysis.

Rx

ABHR 1-MG, 25-MG, 1-MG, 5-MG PER 5-ML SUSPENSION

For 100 mL

Lorazepam	20 mg
Haloperidol	20 mg
Diphenhydramine	500 mg
Metoclopramide	100 mg
Sodium chloride	100 mg
Stevia concentrate solution (500 mg/mL)	1 mL
Sodium saccharin concentrate solution (30 mg/0.1 mL)	0.2 mL
Flavor, vanilla	1 mL
Flavor, marshmallow	1 mL
Flavor, vanilla butternut	0.6 mL
Flavor, English toffee	0.6 mL
Glycerin	1.6 mL
Syrup, simple	100 mL

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Grind all the powders together in a mortar.
4. Wet the resultant mixture with the glycerin to make a paste.
5. Add the sweeteners and all the flavors. *Note: The patient's preferences for flavors can be accommodated.*
6. Bring to volume with the simple syrup.

PACKAGING

Dispense in an amber-colored oval prescription bottle.

LABELING

One tsp 2 to 4 times daily, depending on the patient's needs, to control nausea and vomiting.

STABILITY

A beyond-use date of 14 days can be assigned to this preparation.

STORAGE

Store at room temperature.

USE

To control nausea and vomiting.

QUALITY CONTROL

Use organoleptic methods including sight, smell, and taste.

Rx

ANALGESIC RECTAL ROCKET SUPPOSITORY

For 6 Rectal Rockets

Hydrocortisone, micronized	0.37 g
Lidocaine	0.79 g
Silica gel, micronized	0.12 g
Food color, green	0.06 g
Wax, paraffin block	12.8 g
Base, fatty acid base, grated	24.8 g

Notes: Each mold must be calibrated before proceeding. Then adjust the amount of bases needed accordingly. Before it is filled, each mold should be lightly sprayed with PAM (ConAgra Foods, Inc., Omaha, Nebraska), a food-grade silicone, or a light mineral oil to facilitate the smooth removal of the suppository from the mold.

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Use low heat (60°C) to melt the fatty acid base and the paraffin; do not microwave. Melt the fatty acid base first, and then add the paraffin.
4. Mix the hydrocortisone, lidocaine, green food color, and micronized silica gel in a mortar until that mixture is uniform in consistency.
5. Add the product of step 4 to the product of step 3 gradually; prevent clumping. May sift if desired.
6. Pour the mixture into a Rectal Rocket mold and allow the mixture to solidify at room temperature. *Note: A syringe and a 13-guage (i.e., 3.5-inch long) stainless steel needle attached to a 20-mL syringe can be used to draw up the melt and inject it into each mold.* Slightly overfill each mold until a rounded top appears. The melt will settle slightly when dry. Let the melt solidify at room temperature for 30 to 60 minutes. After 60 minutes, place the solidified melt in the refrigerator for 15 minutes.
7. Remove the solidified melt from the refrigerator, carefully pry apart the mold (see the next step before proceeding), and let each Rectal Rocket settle on a paper towel.
8. With the flange at the top of the mold, use your thumbs to push each suppository away from the mold gently until the flange is a slight distance from the mold. Do not exert too much pressure, or the suppository might break. You can also insert the end of your thinnest, smallest spatula to gently pry the flange end away from the mold.

PACKAGING

Place each suppository in a small polyester bag. Place the polyester bags containing the suppositories into a larger amber-colored zip-lock–type bag.

LABELING

Insert 1 suppository rectally up to the flange at bedtime and leave it in place over night.

STABILITY

A beyond-use date of 180 days can be assigned to this preparation.

STORAGE

Refrigerate.

USE

Used to shrink and eliminate hemorrhoids.

QUALITY CONTROL

Use organoleptic methods including sight and smell.

Rx

CHLORAMPHENICOL 5% WITH METRONIDAZOLE 2% POLYOX BANDAGE

For 30 g

Chloramphenicol	1.5 g
Polyox WSR-301	3.0 g
Methocel E4M	25.2 g
Metronidazole	0.6 g

Note: Dispense with Polyox (The Dow Chemical Company, Midland, Michigan) application instructions.

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Mix the chloramphenicol and the metronidazole together and reduce the particle size of the resultant mixture in the mortar.
4. Mix the Polyox and the Methocel (The Dow Chemical Company) together in another mortar.
5. Incorporate, geometrically, the product of step 3 with the product of step 4.

PACKAGING

This powder must be dispensed in an accordion puffer. Also, dispense in a 4-oz plastic squeeze bottle filled with water for irrigation.

LABELING

Include directions for application. Spray water for irrigation onto the wound and then puff the powder onto that wet surface. Repeat that process 3 times total, one after another per application, for a total of 3 applications of powder. Repeat that application every 12 hours, if that is the recommended protocol. Dress the wound once or twice daily, depending on the recommended protocol.

STABILITY

A beyond-use date of 180 days can be assigned to this preparation.

STORAGE

Store at room temperature.

USE

For the treatment of malignant, infected, necrotic, fungating wounds of breast, head, or neck.

QUALITY CONTROL

Use organoleptic methods including sight and smell.

Rx

LEVORPHANOL 4-MG/ML CONCENTRATE SYRUP

For 100 mL

Levorphanol (levorphanol 2-mg tablets)		400 mg (200 each); can be used if powder is unavailable
Propylene glycol		15 mL to be used to make a paste of the tablets
Flavor, bitterness suppressing		3 mL
Flavor, piña colada, anhydrous		3 mL
Stevia concentrate (500 mg/mL)		3 mL
Water (purified)		27 mL
Syrup, simple	qs	100 mL

Note: Levorphanol 2-mg tablets, 200 each, can be used if levorphanol powder is not available. Propylene glycol, 15 mL, may be used to make a paste of the levorphanol tablets.

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Mark the dispensing bottle at the final (qs) total volume with a marker.
4. Grind the tablets into a fine powder or use the active ingredient as a powder.
5. Make a paste with propylene glycol (only if using ground tablets).
6. Add the purified water to make a solution.
7. Add the flavors and sweeteners.
8. Add the syrup to the "qs" mark on the dispensing bottle.

PACKAGING

Dispense in an amber-colored oval prescription bottle. Add an easy-fill adapter cap and a 1-mL oral syringe to ensure accurate dosing.

LABELING

One milliliter every 4 to 6 hours to control pain.

STABILITY

A beyond-use date of 30 days can be assigned to this preparation.

STORAGE

Store at room temperature or refrigerate.

USE

Relief of pain that cannot be controlled with other opiates.

QUALITY CONTROL

Use organoleptic methods including sight, smell, and taste; levorphanol analysis.

Rx

LIDOCAINE 1% INHALATION SOLUTION 10 MG/3 ML

For 100 mL

Lidocaine hydrochloride		1.23 g
Saline, normal, for irrigation		78 mL
Benzalkonium chloride 1:100 solution		1 mL
Water, sterile for irrigation	qs	100 mL

Notes: It is important to remember that 1.23 mg of lidocaine hydrochloride yields 1 mg of lidocaine base activity. This is a sterile preparation, and this entire procedure must be performed by a compounding pharmacist who is validated in aseptic compounding and should be prepared under a laminar airflow hood or in a glove box to ensure sterility.

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Dissolve the lidocaine hydrochloride in 30 mL of normal saline for irrigation.
4. Add the benzalkonium chloride solution.
5. Bring to volume with the sterile water for irrigation.
6. Filter the preparation, under a hood, through a 0.22-micron filter attached to a large syringe.

PACKAGING

Dispense in 3.5-mL sterile Uni-Dose (Wheaton, Millville, New Jersey) vials.

LABELING

Decant 1 vial into a nebulizer machine and inhale the contents 4 times daily.

STABILITY

A beyond-use date of 14 days can be assigned to this preparation.

STORAGE

Store at room temperature.

USE

For the treatment of intractable cough.

QUALITY CONTROL

Use organoleptic methods including sight and smell; lidocaine analysis.

Rx

MONSEL'S SOLUTION GEL

For 450 mL

Hydroxyethylcellulose-5000		18 g
Ferric subsulfate solution	qs	450 mL

METHOD OF PREPARATION
1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Place the ferric solution in a large beaker on a spinner plate.
4. Use a large (80-mesh) sifter to gradually add the hydroxyethylcellulose-5000 powder. Use a large spatula to manually mix in the hydroxyethylcellulose, and ensure that it is evenly distributed.
5. Pour the mixture back into the original solution bottle.
6. Shake periodically over the next few hours to ensure proper jelling.

PACKAGING
Dispense in a 480-mL amber-colored prescription bottle.

LABELING
Apply topically to the wound area with each dressing change to treat bleeding, oozing wounds.

STABILITY
A beyond-use date of 180 days can be assigned to this preparation.

STORAGE
Store at room temperature.

USE
To control oozing or bleeding wounds.

QUALITY CONTROL
Use organoleptic methods including sight and smell.

Rx

MORPHINE SULFATE INHALATION SOLUTION 2.5 MG/3 ML

For 300 mL

Morphine sulfate		0.25 g
Citric acid hydrous		0.1 g
Water, sterile for irrigation	qs	300 mL

Notes: This is a sterile preparation, and this entire procedure must be performed by a compounding pharmacist who is validated in aseptic compounding and should be prepared under a laminar airflow hood or in a glove box to ensure sterility. This preparation can be filtered through a 0.22-micron filter that is attached to the end of a 60-mg [or larger] syringe into the sterile Uni-Dose (Wheaton) vial. Using a large-volume filter results in losing too much of the preparation to the filter.

METHOD OF PREPARATION
1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Dissolve the morphine and the citric acid in 80 to 90 mL of sterile water for irrigation.
4. Bring that mixture to volume.
5. Filter the mixture through a 0.22-micron filter into sterile Uni-Dose (Wheaton) plastic vials.

PACKAGING
Dispense in 3.5-mL sterile Uni-Dose (Wheaton) vials with a screw cap.

LABELING
Decant 1 vial into the nebulizer machine and inhale the contents 4 times daily.

STABILITY
A beyond-use date of 14 days can be assigned to this preparation.

STORAGE
Store at room temperature.

USE
To treat dyspnea.

QUALITY CONTROL
Use organoleptic methods including sight and smell; morphine sulfate analysis.

Rx

PHENYTOIN 5% WITH METRONIDAZOLE 1% OINTMENT

For 100 g

Metronidazole	1 g
Polyethylene Glycol 300 base, liquid	62.33 g
Phenytoin	5 g
Polyethylene Glycol 1450 base, solid	31.67 g

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Triturate the metronidazole and the phenytoin together.
4. Melt the solid Polyethylene Glycol 1450 at 55°C and add the Polyethylene Glycol 300 liquid slowly. Let that mixture warm for 30 minutes.
5. Add the mixture from step 3 to the melted bases and stir until uniformly mixed. Let that mixture spin until the melt is clear.
6. Remove the melt from heat and allow it to congeal while spinning. Do not pour hot melt into the final dispensing containers.
7. Triturate the melt on a pill tile, in an unguator, or through an ointment mill to ensure uniform mixing.

PACKAGING

Dispense in an ointment tube or a syringe.

LABELING

If possible, use normal saline to clean the wound before treatment. Apply 5 g (1 rounded tsp) to a silver-dollar–sized ulcer twice daily.

STABILITY

A beyond-use date of 180 days can be assigned to this preparation.

STORAGE

Store at room temperature.

USE

For the treatment of decubitus ulcers, pressure sores, bed sores.

QUALITY CONTROL

Use organoleptic methods including sight and smell.

Rx

POTASSIUM PERMANGANATE 0.01% (1:10,000) IRRIGATION SOLUTION

For 1000 mL

Potassium permanganate		0.1 g
Water, sterile for irrigation	qs	1000 mL

Note: This entire procedure must be performed under a laminar hood or in a glove box to ensure sterility.

METHOD OF PREPARATION

1. Calculate the required quantity of each ingredient for the total amount to be prepared.
2. Weigh and/or measure each ingredient accurately.
3. Place the potassium permanganate powder in 10 mL of sterile water for irrigation and dissolve the powder.
4. Place the resultant mixture under the laminar hood.
5. Remove 10 mL of water from the 1000 mL of sterile water for irrigation and discard that 10 mL.
6. Filter the 10-mL concentrate solution of potassium permanganate, through a 0.22-micron filter into the 990 mL of sterile water for irrigation.
7. Reseal the top of the sterile water for irrigation container.

PACKAGING

Dispense in the 1000-mL sterile water for irrigation container.

LABELING

Irrigate the catheter per the healthcare agency protocol.

STABILITY

A beyond-use date of 30 days can be assigned to this preparation.

STORAGE

Protect from light and store at room temperature.

USE

For the irrigation of indwelling catheters to treat chronic urinary tract infections.

QUALITY CONTROL

Use organoleptic methods including sight and smell.