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# PLO GEL

Application in Pharmacy Compounding

Pharmedica Enterprise • Compilation 2008

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# Table of Contents

<b>Nifedipine</b>	<b>2</b>
<b>Ketamine, Amitriptyline &amp; Gabapentin</b>	<b>3</b>
<b>Promethazine</b>	<b>4</b>
<b>Testosterone</b>	<b>5</b>
<b>Emu Oil</b>	<b>6</b>

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# Nifedipine

Treatment of peripheral circulatory impairment such as diabetic foot and varicose ulcer

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## Nifedipine PLO Gel

*For 100 g*

Nifedipine	8 g
Ethoxy diglycol	10 ml
<b>Organic Phase</b>	22 ml
<b>Aqueous Phase</b> qs	100 ml

### COMPOUNDING METHOD

- 1 Warm the ethoxy diglycol to 60°C
- 2 Place the nifedipine in a mortar and add ethoxy diglycol to make a paste.
- 3 Add Organic Phase to step 2 and mix vigorously until it smacks.
- 4 Add Aqueous Phase in increments to volume and mix well until it gels.
- 5 Process the mixture through the ointment mill.
- 6 Package and label.

### NOTE

Protect from sunlight as much as possible during compounding procedure.

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# Ketamine, Amitriptyline & Gabapentin

Treatment of moderate to severe pain associated with neuropathy

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## **Ketamine HCl, Amitriptyline HCl & Gabapentin PLO Gel**

*For 100 g*

Ketamine hydrochloride	5 g
Amitriptyline hydrochloride	2 g
Gabapentin	6 ml
Diethylene glycol monoethyl ether	10 ml
<b>Organic Phase</b>	<b>22 ml</b>
<b>Aqueous Phase qs</b>	<b>100 ml</b>

### **COMPOUNDING METHOD**

- 1 Accurately weigh/ measure each of the ingredients.
- 2 Mix the ketamine hydrochloride, amitriptyline hydrochloride and gabapentin with the diethylene glycol monoethyl ether.
- 3 Add Organic Phase and mix well.
- 4 Add sufficient Aqueous Phase to volume and mix well using a shearing stress technique.
- 5 Package and label.

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# Promethazine

Treatment & Prevention of Nausea & Vomiting

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## Promethazine Hydrochloride PLO Gel

*For 100 g*

Promethazine HCl	5 g
Purified water	4 ml
Organic Phase	22 ml
Aqueous Phase qs	100 ml

### COMPOUNDING METHOD

- 1 Calculate the required quantity of each ingredient for the total amount to be prepared. Accurately weigh/measure each ingredient.
- 2 Dissolve the promethazine HCl in the purified water.
- 3 Add this solution to about 70 ml of the Aqueous Phase and mix well.
- 4 Incorporate the Organic Phase using a shear mixing.
- 5 Add additional Aqueous Phase to volume and continue shear mixing.
- 6 Package and label.

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# Testosterone

Treatment of Hypogonadism

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## Testosterone PLO Gel

*For 100 g*

Testosterone	2 g
Propylene Glycol	20 ml
<b>Organic Phase</b>	20 g
<b>Aqueous Phase</b> qs	100 ml

### COMPOUNDING METHOD

- 1 Prepare a paste of the testosterone and propylene glycol.
- 2 Incorporate the Organic Phase and mix well.
- 3 Add sufficient Aqueous Phase to volume and mix well.
- 4 Package and label.

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# Emu Oil

Emollient in the treatment of chronic dry skin

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## EMU PLO Gel

*For 100 g*

Emu Oil	30 ml
<b>Organic Phase</b>	15 ml
<b>Aqueous Phase</b> qs	100 ml

### COMPOUNDING METHOD

- 1 Accurately weigh/ measure each of the ingredients.
- 2 Mix the Emu Oil well in Organic Phase until a miscible semi-solid is formed.
- 3 Allow the mixture to stand for 2 -3 minutes.
- 4 Add sufficient Aqueous Phase to volume and mix well using a shearing stress technique.
- 5 Package and label.



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