Exp. No.-4

Aim: To prepare and submit 30ml of Castor oil emulsion. **Reference:**

1. Mehta R.M., Dispensing Pharmacy, Vallabh Prakashan, New Delhi, 2017; 217

Requirements:

Apparatus Required:

Mortar & pestle, weigh balance, measuring cylinder, glass rod, spatula, beaker, funnel etc. **Chemical Required:** Castor oil and Cinnamon water q. s.

Principle:

An emulsion is a mixture of two or more liquids that are normally immiscible (unmixable or unblendable) owing to liquid-liquid phase separation. Depending upon the nature of the dispersed phase, the emulsions are classified as (i) Water-in-oil emulsion (W/O) (ii) oil in water emulsion (O/W) Liquid paraffin is primarily used as a pediatric laxative in medicine and is a populartreatment for constipation and encopresis. Castor oil emulsion is used as a laxative, to empty the GI tract, while the patients is prepared for thecolon X –ray, proctoscopy and endoscopic examination.

Formula:

| Sl. No. | Ingredients | Official formula | Working formula | Required quantities |
|------------|----------------------|---------------------|-----------------|-------------------------------|
| 1 | Castor oil | 20ml | | |
| 2 | Cinnamon water q. s. | 50ml | | 25ml |

Calculation:

Procedure:

- \checkmark Weigh calculated quantity of acacia is take in a mortar.
- ✓ Measured quantity of cinnamon water at once (calculated for primary emulsion formula) is added into the mortar.
- \checkmark The content, in the mortar is triturated to form mucilage.
- Measured quantity of castor oil is added in small quantities, with constant, rapid and light trituration to produce a thick cream. Trituration is continued for three minutes to obtain a white stable emulsion. It is indicated by click sound.
- \checkmark Some more quantity of cinnamon water is added gradually with continuous trituration.
- \checkmark The contents are transferred into a measuring cylinder.
- ✓ The pestle and mortar are rinsed with cinnamon water and rinsing are transferred into the measuring cylinder.
- ✓ The quantity is adjusted to the required volume using cinnamon water and the contents are stirred well.
- \checkmark The castor oil emulsion is then transferred into a wide mouthed light resistant container.
- \checkmark The bottle is capped, labelled, polished and submitted.

Use: Castor oil emulsion is used as a laxative, to empty the GI tract, while the patients is prepared for the colon X –ray, protoscopy and endoscopic examination.

Storage: It should be store in a tightly –closed container in a cool place.Category: Laxative.Dose: 4 -6 mlDirection: Take on an empty stomach followed with one full glass of water.

Label:

| CASTOR OIL EMULSION | | | | | | |
|--|----------------|--------------|--|--|--|--|
| 25ml | | | | | | |
| Composition: | | | | | | |
| Castor oil | BATCH NO. | MFG. DATE: | | | | |
| Cinnamon water q.s | MFG. LIC. NO.: | EXPIRY DATE: | | | | |
| Category: Laxative | - | | | | | |
| FOR INTERNAL USE ONLY. | | | | | | |
| Use: Castor oil emulsion is used as a laxative, to empty the GI tract, while the patients are prepared | | | | | | |
| for the colon X –ray, protoscopy and endoscopic examination. | | | | | | |
| Storage: It should be store in a tightly –closed container in a cool place. | | | | | | |
| MFG BY: ABCD Batch: | | Roll No.: | | | | |

Report: