

**Exp. No.-5****Date:****Aim:** To prepare and submit 30ml of Cod Liver Oil emulsion.**Reference:**

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

**Requirements:****Apparatus Required:**

Mortar &amp; pestle, weigh balance, measuring cylinder, glass rod, spatula, beaker, funnel etc.

**Chemical Required:** Cod liver oil, Egg yolk, Purified 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). Cod liver oil is a rich sources of vitamin D and therefore used as an anti-rachitic agent.

**Formula:**

Sl. No.	Ingredients	Official formula	Working formula	Required quantities
1	Cod liver oil	30ml		
2	Egg yolk	4ml		
3	water q.s	60ml		30ml

**Calculation:****Procedure:**

- ✓ Egg yolk is separated from the broken egg and placed in a measure. Equal volume of water is added and mixed thoroughly.
- ✓ The calculated volume of the above egg yolk is placed in a mortar.
- ✓ The calculated volume of cod liver oil is added to the mortar and mixed with constant stirring.
- ✓ Purified water (1/3<sup>rd</sup> the total quantity) is gradually added with constant trituration.
- ✓ The mixture is strained through a muslin cloth.
- ✓ Mortar and pestle are rinsed with little volume of water and transferred through the muslin cloth.
- ✓ The volume is adjusted to the required level with water in a measuring cylinder.
- ✓ The contents are mixed well and transferred into a narrow-mouthed container
- ✓ The container is capped, polished, labelled and dispensed.

**Use:** It is used as an Anti-rachitic agent (in deficiency of vitamin D).**Storage:** It should be store in a tightly well closed container in a cool place.**Category:** Anti-rachitic (in deficiency of vitamin D)**Dose:** Not more than 10ml daily.

**Label:**

<b>COD LIVER OIL EMULSION</b>		
<b>30ML</b>		
<b>Composition:</b> Cod liver oil Egg yolk Purified water q. s	<b>BATCH NO.</b>	<b>MFG. DATE:</b>
<b>Category:</b> Anti-rachitic (in deficiency of vitamin D)	<b>MFG. LIC. NO.:</b>	<b>EXPIRY DATE:</b>
<b>FOR INTERNAL USE ONLY</b>		
<b>Use:</b> It is used as an Anti-rachitic agent (in deficiency of vitamin D)		
<b>Storage:</b> It should be store in a tightly well closed container in a cool place.		
<b>MFG BY:</b> ABCD	<b>Batch:</b>	<b>Roll No.:</b>

**Report:**