

**Exp. No.-7****Date:****Aim:** To prepare and submit 20ml of Magnesium Hydroxide mixture.**Reference:**

- ✓ Mehta R.M., Dispensing Pharmacy, Vallabh Prakashan, New Delhi, 2017; 150-151.
- ✓ Subrahmanyam C.V.S., Thimmasetty J.J, Prabhushankar G.L., Laboratory manual of Pharmaceutics. Vallabh Publication, Delhi, 2019; 47-48.

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

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

**Chemical Required:**

Magnesium sulphate, sodium hydroxide, light magnesium oxide and purified water.

**Principle:**

It is aqueous of colloidal dispersion of magnesium hydroxide. It is prepared by precipitation method and hydration method or both. It is not excessively thick or thin but holds design viscosity, it has two actions in low dose (1 -4ml) it acts as an antacid, while in higher dose (8–10ml) it acts as a laxative.

**Reaction:****Formula:**

Sl. No.	Ingredients	Official formula	Working formula	Required quantities
1	Magnesium sulfate	47.5gm		
2	Sodium hydroxide	50.5gm		
3	Light magnesium oxide	15gm		
4	Purified water	1000ml		20ml

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

- ✓ Dissolve sodium hydroxide in sufficient purified water contained in a beaker.
- ✓ Triturate Magnesium oxide in a mortar with the solution of hydroxide to form a smooth cream.
- ✓ Dissolve magnesium sulphate in sufficient water in a separate beaker.
- ✓ Add cream to the solution of magnesium sulphate with constant stirring. This mixture is set aside for 48 hrs.
- ✓ After 48 hrs pour off the supernatant liquid.
- ✓ Add hot purified water to the precipitate of magnesium hydroxide to wash the sulphate

ions from precipitate.

- ✓ Transfer the washed precipitate to the suitable container and label it.

**Dose:** 1 to 4ml as antacid, 8 to 10ml as laxative.

**Storage:** Stored in an air tight container in a cool place.

**Direction:** Shake well before use

**Label:**

<b>MAGNESIUM HYDROXIDE MIXTURE</b>		
<b>20ml</b>		
<b>Composition:</b> Magnesium sulfate Sodium hydroxide Light magnesium oxide Purified water	<b>BATCH NO.</b>	<b>MFG. DATE:</b>
<b>Category:</b> Laxative.	<b>MFG. LIC. NO.:</b>	<b>EXPIRY DATE:</b>
<b>FOR INTERNAL USE ONLY</b>		
<b>Use:</b> Laxative & Antacid		
<b>Storage:</b> Stored in a well closed container dark in a cool place and temperature not exceeding 25 <sup>0</sup> C		
<b>MFG BY:</b> ABCD	<b>Batch:</b>	<b>Roll No.:</b>

**Report:**