

LABEL

<p><u>Composition:</u></p> <p>50 gm contains:</p> <p>Sodium Alginate :</p> <p>Glycerin :</p> <p>Methyl Paraben :</p> <p>Calcium Gluconate:</p> <p>Distilled Water :</p> <p><u>Uses:</u></p> <p><u>Precaution:</u></p> <p>Manufactured By:</p>		<p>Storage:</p>
		<p>Mfg. lic. No.:</p> <p>Batch No. :</p> <p>Mfg. date :</p> <p>Exp. Date :</p> <p>MRP Rs :</p> <p>(Inclusive of all taxes)</p> <p>Marketed By:</p>
	<p>Sodium Alginate Gel (50 gm)</p>	

Calculation:

$$\text{Factor} = \frac{\text{Required quantity}}{\text{Quantity given}} = \dots\dots\dots$$

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Date: / /

Aim: To prepare and submit 50 gm of Sodium alginate gel.

Reference:.....
.....

Requirements:

Apparatus/Equipment required:.....

Chemical required:.....
.....

Theory: Sodium alginate is the purified carbohydrate product extracted from brown seaweeds by the use of dilute alkali. It is found in all species of brown seaweeds (Family: Phaeophyceae). Sodium Alginate is used in the preparation of paste, gel, creams and for thickening and stabilizing emulsions. It is a good suspending and thickening agent, but a poor emulsifying agent.

Sodium alginate gel is used as lubricant and dermatological vehicle. Sodium alginate gel is used as lubricant and dermatological vehicle. The viscosity of sodium alginate gel can be increased by adding soluble calcium gluconate.

Sodium Alginate Gel Formulation Table:

S. No.	Chemical Name	Quantity Given (100 gm)	Quantity Taken (Factor x Quantity given)	Uses of Ingredients
1.	Sodium Alginate	7 gm		Gelling agent
2.	Glycerin	7 ml		Humectant, Dispersing agent
3.	Methyl hydroxy benzoate	0.2 gm		Preservative
4.	Calcium Gluconate	0.05 gm		Viscosity Enhancer
5.	Distilled Water	100 ml		Vehicle

Procedure:

1. Accurately weigh all the ingredients for sodium alginate gel
2. Add sodium alginate & glycerin in glass mortar.
3. Dissolve methyl hydroxy benzoate and calcium gluconate in about 3/4th quantity of Purified water with heating.
4. Cool it to about 60° C and stir it rapidly.

5. Then add sodium alginate and glycerin mixture to it in small quantity and stir it vigorously until the homogeneous mixture is produced.
6. Transfer in to a suitable container, cork it, label and then submit.

Storage: In a well closed container and in a cool place.

Auxiliary Label: FOR EXTERNAL USE ONLY.

Precautions:

- O Avoid the use of gel when irritation and allergic reactions to the skin.
- O Keep away from children.

Uses:

- ✓ Sodium alginate gel is used as lubricant and dermatological vehicle.
- ✓ It is used as an emulsifier or stabilizer.
- ✓ It is also widely used in the pharmaceutical industry as a coating element of drugs.
- ✓ It is used for facilitating the controlled release of active substances.
- ✓ It is used to maintaining flavor compounds.

Observation and Evaluation:

Name of the Preparation	Test	Specification	Observation
Sodium alginate gel	Description	Smooth Consistency	
	Colour	White, Light Yellow	
	Odour	Characteristics	

Result: I have prepared and submit the _____ in a neat and cleaned glass bottle and labeled it properly.

Questions Bank

1. What is the Sodium Alginate Gel?
2. What are the lubricants?
3. What is the use of Methyl hydroxy benzoate in gel?
4. Write the container name used for gel.
5. Write the molecular formula of Calcium Gluconate.
6. Write the chemical formula of Glycerin.
7. What is the meaning of Smooth Consistency
8. Write the biological source of Sodium Alginate.
9. Write the use of Sodium Alginate Gel.
10. Write the two branded product names of Sodium Alginate Gel.