

PHYSICAL & CHEMICAL EVALUATION OF CASTOR OIL

Practical - 30

Date: .../.../.....

PHYSICAL AND CHEMICAL EVALUATION OF CASTOR OIL**Aim:** To perform the physical and chemical tests for evaluation of Castor Oil.**Reference:**.....
.....**Requirements:**.....**Synonym:** Castor bean oil, castor oil seed, Ricinus oil, cold-drawn castor oil.**Biological Source:** It is the fixed oil obtained by cold expression of the seeds of **Ricinus communis Linn.****Family:** Euphorbiaceae**Physical Characteristics:**

S. No.	Physical Character	Observation
1.	Colour	
2.	Odour	
3.	Taste	
4.	Shape	
5.	Size	
6.	Tears	
7.	Mass	
8.	Solubility	

Chemical tests/Identification tests:

S. No	Test	Observations
1.	Add 5 ml of light petroleum ether (40° - 60°) to 10 ml of castor oil.	
2.	Oil + equal volume of alcohol and cool to 0°C for 3hrs	

Precautions:

1. Avoid direct contact with any hazardous chemical.
2. Do not mouth pipette.

Uses:

- Castor oil is mild purgative, fungistatic, used as an ointment base, as plasticizer, wetting agents, as a lubricating agent.
- Ricinoleic acid is used as an emollient in the preparation of lipsticks.
- It employed to make pharmaceuticals and cosmetics in the textile and leather industries.
- For manufacturing plastics and fibres.

Report: From the above Physical characters and chemical test the given crude drug was identified as

_____.

Questions Bank

1. What is the solubility of Castor oil?
2. Write the botanical name of Castor oil.
3. What are the uses of Castor oil?
4. Write the name of chemical constituent of Castor oil.
5. Write the chemical structure of Ricinoleic acid.
6. Write a note on physical characters of Castor oil.
7. What happen when castor oil treated with alcohol?
8. Write the hindi name of castor oil.
9. Castor oil used as a plasticizer, explain it.
10. Paste the one marketed preparation of Castor oil.