

Evaluation of Castor Oil

Experiment 32 - Practical Notes

Name: _____ Roll no.: _____ Date: _____

Aim

To evaluate the assigned castor oil specimen using organoleptic, physical and characteristic tests.

Principle

Evaluation assesses identity and quality using a combination of source, physical behaviour and prescribed tests. Fixed oil from *Ricinus communis* seeds.

Specimen Features

- Clear viscous pale-yellow fixed oil.
- Use authenticated oil; no seed processing or ricin-related work is included.

Requirements

- Authenticated material and coded teaching specimen
- Assigned monograph, balance, glassware and prescribed reagents
- Controlled heating equipment where the method requires it

Procedure

1. Profile

Record the source, supplied form and visible features. Clear viscous pale-yellow fixed oil.

2. Physical behaviour

Carry out the assigned dispersion, dissolution, swelling or gel test using matched conditions.

3. Characteristic test

Record viscosity comparison and the prescribed physical/chemical checks; assess acid value if assigned.

4. Quantitative test

Where assigned, perform the official moisture, ash, viscosity, acid-value or other selected quality test.

5. Assess

Compare actual results with the named method and limit. Use authenticated oil; no seed processing or ricin-related work is included.

6. Report

State identity support, quality findings and any test that was not performed.

Observations and Record

Check	Actual observation
Source / appearance	_____
Physical behaviour	_____
Characteristic test	_____
Quantitative result / units	_____
Assigned limit / conclusion	_____

Worked Example

The numbers below are illustrative; enter your own observations in the record.

- Acid value (mg KOH/g) = blank-corrected titre (mL) × titrant normality × 56.1 / oil mass (g).
- Illustrative data: 0.40 mL of 0.100 N titrant for 2.00 g oil gives 1.122 mg KOH/g; compare with the assigned specification.

Result

The specimen was _____. Tests performed: _____. Observed quality findings and applicable limits: _____.

Precautions

- Do not taste the specimen or deliberately inhale fumes.
- Match quantities, temperature and observation time when comparing materials.
- Use the laboratory's approved solvent and reagent controls.

Viva Questions and Answers

1. Why combine tests?

Appearance or one colour reaction may be shared by adulterants or related materials.

2. What is the distinguishing context?

Use authenticated oil; no seed processing or ricin-related work is included.

3. Can a worked number be entered as an observation?

No; the student records actual measured or demonstrated data.

Continue Learning with FirstHope

Complete Notes on the FirstHope App

Complete subject and semesters are available on FirstHope app only.

- Get complete subject and semester notes in the FirstHope app.
- Available for B.Pharm, D.Pharm, M.Pharm and Pharm.D students.

[Click here to get the FirstHope app](#)

Join the FirstHope Telegram Channel

Join FirstHope Notes and keep up with channel updates.

[Click here to join Telegram](#)

Instagram

@firsthope.official

[Click here to follow Instagram](#)

YouTube Channel

FirstHope-Pharmacy / Live streams

[Click here to watch the YouTube channel](#)

WhatsApp Channel

Follow FirstHope on WhatsApp.

[Click here to join the WhatsApp channel](#)

FirstHope Website

firsthopenotes.com

[Click here to visit the website](#)