

PHYSICAL & CHEMICAL EVALUATION OF TRAGACANTH

Practical - 32

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

PHYSICAL AND CHEMICAL EVALUATION OF TRAGACANTH**Aim:** To perform the physical and chemical tests for evaluation of Tragacanth.**Reference:**.....
.....**Requirements:**.....**Synonyms:** Goat's thorn, gum dragon, gum tragacanth, hog gum.**Biological Source:** It is the air-dried gummy exudates from the stems and branches of **Astragalus gummifer****Labill.****Family:** Leguminosae**Physical Characteristics:**

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

Chemical tests/Identification tests:

S. No	Test	Observations
1.	An aqueous solution of tragacanth on boiling with conc. HCl.	
2.	An aqueous solution of tragacanth with ruthenium red solution.	
3.	When a solution of tragacanth is boiled with few drops of FeCl ₃ [aqueous 10% (w/v)].	
4.	An aqueous solution of tragacanth with lead acetate.	

5.	When tragacanth and precipitated copper oxide are made to dissolve in conc. NH_4OH .	
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Precautions:

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

Uses:

- It is used as a demulcent in cough and cold preparations and to manage diarrhoea.
- It is used as an emollient in cosmetics.
- Tragacanth is used as a thickening, suspending and as an emulsifying agent.
- Mucilage of tragacanth is used as a binding agent in the tablets and also as an excipient in the pills.

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

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Questions Bank

1. What is the solubility of Tragacanth?
2. Write the botanical name of Tragacanth.
3. What are the uses of Tragacanth?
4. Write the name of chemical constituent of Tragacanth.
5. What happen When a solution of tragacanth is boiled with few drops of FeCl_3 ?
6. Write a note on physical characters of Tragacanth.
7. Tragacanth used as a demulcent in cough and cold preparations explain it.
8. What is the suspending agent?
9. Tragacanth used as a binding agent in the tablets, explain it.
10. Paste the one marketed preparation of Tragacanth.