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## Gum arabic acacia for manufacturing of tablet & pellets coating materials

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**Introduction:** Gum arabic is a complex, loose aggregate of sugars and hemicelluloses composed of arabic acid nucleus connected with calcium, magnesium, potassium and sugars arabinose, galactose, and rhamnose. In this study, the use of gum arabic acacia in the manufacturing of tablet coating material, using water and plasticizer to add elasticity and flexibility is detailed.

**Methodology:** The study was performed using a solution of gum arabic acacia in a concentration (10%), using a pilot small coating machine with an inlet temperature 40°C, and spraying rate 10ml every 5 minutes on the top of placebo tablet bed while continuous drying. The ratio of gum: water and plasticizer plays good roles in final coat characteristic. Physical tests were done for the tablets before and after the process.

**Results:** The final placebo products after coating, should be inspected and tested for appearance and performance inspection should include checks for color, size, appearance, and any physical deficits in the coating, which could affect the performance or/and stability of the product.

**Conclusion:** However, the effect of such variables water: plasticizer ratio gives different profiles with different physical characteristics. This study concludes optimized and stable coating formula from gum arabic. The use of colors and anti-transparency additives is highly required for both film and enteric coat, for technological identification, and according to customers needs.

### Biography

Suad Yousif Abdalla Alkarib has completed her PhD from University of Khartoum. She is the Founder of College of Pharmacy in Karary University. Before that, she was a Director General Manager for the Wafrapharma Laboratories Ltd. She is a Member of the Sudanese Medical Council, the Scientific Researches Committee in Gum Arabic Board (Sudan), and the Arab Administrative Development Organization (League of Arab States). She is the Rapporteur of the Industrial Pharmacy Committee in the Pan Arab Colleges of Pharmacy (October-2012). She is the Member of the proposed Fellowship in Technology of Industrial Pharmacy (Council of pharmaceutical specialties, Sudan). She has got a Certificate of Honor as a Leader in the field of pharmacy, and the first female Major-General (Jan-2011) of Sudan. She has got major awards and decorations in Competency - Duty - The National Rescue - Golden Defense. She has published more than ten papers in different journals and conferences.

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