

A Review Article on Formulation and Evaluation of Gels

**Shubhangi Bapusaheb Mhaske, Priya Arun Walke, Dhananjay Chandrakant Abhang,
Asst Prof Miss. Jayashri S. Kasar**

Mrs. Saraswati Wani College of Pharmacy , Ganegaon Ahmednager, Maharashtra, India
shubhangimhaske504@gmail.com

Abstract: Topical gels, favored for their advantages over creams and ointments, are a common dosage form in cosmetics and skin disease treatments, delivering drugs directly to the application site for prolonged action. These gels consist of a gelator, solvent, active drug, and other excipients, and are categorized as either organogels or hydrogels, with their formulation and preparation contingent on the properties of the ingredients used. This review compiles recent literature, emphasizing a rational approach to topical formulation and the fundamental components of these systems. As the skin is an easily accessible organ for topical drug administration, this method is a main route for drug delivery, however, widely used topical agents like ointments and creams often present drawbacks such as stickiness, poor spreadability, the need for rubbing during application, and stability issues. Consequently, gels have gained popularity in both cosmetic and pharmaceutical applications within the realm of semisolid preparations. Gels are essentially colloids, primarily composed of liquid (typically 99% by weight), immobilized by surface tension within a macromolecular network of fibers formed by a small amount of a gelatinous substance..

Keywords: Skin, Topical drug delivery system: types, Gels: classification, Gel formulation ingredients, formulation and evaluation

