IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 1, October 2025
Impact Factor: 7.67

Formulation and Evaluation of Effervasant Tablet

Kawade Kartik D., Rathod Sujit S., Supekar Rohini K., Fatangde Tejas B., Bhor Vaishnavi R
Sahakar Maharshi Kisanrao Varal Patil College of Pharmacy, Nighoj
Assistant Professor, Sahakar Maharshi Kisanrao Varal Patil College of Pharmacy, Nighoj
Kawadekartik74@gmail.com

Abstract: *Oral medications are widely used despite some drawbacks, like delayed absorption. Liquid forms can help with faster absorption, but some drugs are volatile in liquid for .Effervescent formulations can help speed up drug breakdown and absorption.*

These formulations release carbon dioxide, which helps disintegrate the drug quickly . Ascorbic acid is an essential nutrient that the human body can't produce. We need to get it from external sources like food or supplements. It's an antioxidant that plays a crucial role in various bodily functions. Effervescent granules are designed to release carbon dioxide gas when they come into contact with water. This reaction helps to Break down the granule quickly, Release the active ingredient (in this case, vitamin C),Create a fizzy or bubbly effect Citric acid and tartaric acids react with sodium bicarbonate to produce carbon dioxide. Sodium bicarbonate ingredient helps to neutralize the acid and produce carbon dioxide. Calcium carbonate ingredient can help stabilize the formulation and provide additional buffering Fast dissolution The granules dissolve quickly, releasing the active ingredient. Improved bioavailability The rapid release of the active ingredient can improve its absorption in the body. Patient compliance Effervescent granules can be more pleasant to take than traditional tablets or capsules Disintegration test Measures0 how quickly the granule breaks down in water. Amount of carbon dioxide Measures the amount of gas released during the reaction.pH of formulation Measures the acidity or basicity of the final product.

Some chemicals like citric acid are stored in a form that includes water molecules bound inside their crystal structure. This is called water of crystallization. The chemical's crystal "contains" water. When you heat the material, that water "comes out" (is released).That released water, plus the small amount of water that results from the chemical reaction between acid + base, helps make the powder mixture slightly damp. This dampness binds the powder particles together, making them stick, forming a "coherent mass" (kind of like slightly wet dough).

Keywords: Vitamin c ,Release medication slowly ,Improve absorption

DOI: 10.48175/IJARSCT-29116