

Experiment no. :

Experiment name: The excipients used in tablet formulation with their justification and reasons of use.

The following excipients are used in tablet formulation-

Excipients	Examples	Uses
① Diluent	Lactose, Cellulose, Sorbitol, Mannitol etc.	They are used to make up the bulk of the tablet when the API fails to do so.
② Binder	Gelatin, Cellulose, Polyvinylpyrrolidone, polyethylene glycol etc.	They hold the ingredients in a tablet together. They also provide hardness.
③ Disintegrants	Carboxymethyl Cellulose, sodium starch glycolate etc.	They aid in the breakdown of a tablet upon contact with water.
④ Coating agent	Methyl cellulose, Hydroxy propyl methyl cellulose etc.	They are used to cover the outer surface of a tablet.
⑤ Glidants	Talc, silica etc.	They are used to reduce friction between tablet's powder particles.

Excipients	Examples	Uses
⑥ Lubricants	Stearic acid, Magnesium stearate etc.	They are used to reduce the friction between the punch machine and the powder particles of a tablet.
⑦ Buffering agents	salts of carbonate, citrates, lactates etc.	They are used to prevent the change in desired pH range.
⑧ Preservatives	Methyl paraben, Propyl paraben, Benzoic acid etc.	They are added in tablet formulation to prolong their self life.
⑨ Antioxidants	BHT, BHA etc.	They are added in order to prevent oxidation.
⑩ Wetting agent	sodium lauryl sulphate, cetrinide, Tween 80 etc.	They are added to increase the solubility by lowering the surface tension.
⑪ Coloring agents	Titanium dioxide, Amaranth Carmine etc.	They are used not only to enhance the appearance but also to make it more palatable.
⑫ Flavoring agents	Menthol, clove oil, citric syrup etc.	They are used to mask bitter taste and enhance flavor.