|  |  |  |  |
| --- | --- | --- | --- |
| **Ingredients** | **Quantity in mg for 1 tablet** | **Functional Category** | **Quantity in mg for 10 tablets** |
| Paracetamol | 325 | Antipyretic | 3250 |
| Microcrystalline cellulose | 75 | Directly Compressible Vehicle | 750 |
| Magnesium Stearate (5%) | 2 | Lubricant | 20 |

**Formulation of Paracetamol Tablets**

**Formulation of Paracetamol tablets by direct compression method**.

**Aim:**

To prepare Paracetamol tablet by direct compression method.

**Requirements:**

Paracetamol, Microcrystalline, cellulose, Magnesium stearate.

**Apparatus:**

Weighing balance, motor and pestle, tablet punching machine.

**Theory and principle:**

The materials which are available in crystalline form and free flowing and binding characteristics can be compressed directly, but the majority of drugs cannot be compressed easily in the way because sometimes available in crystalline binding characteristics can majority in the way they produce tablets which may not disintegrate. To overcome this difficulty directly compressible vehicles like Spray dried lactose, anhydrous Lactose, compressible sugar, microcrystalline cellulose, Mannitol etc., can be incorporated to the drug and compressed

Examples of drug that can be compressed directly are Nacl, NaBr, sodium salicylate, kl, KBr, KI, potassium Nitrate, NH4Cl, Aspirin crystals, KMno4 etc. These materials posses necessary cohesive and flow properties, thereby they can be easily compressed.

In that present experiment, paracetamol tablets. were prepared by direct compression method using directly compressible diluent, microcrystalline cellulose. Here, paracetamol is drug & magnesium Stearate is the moderate dose and hence, can be used for preparing tablets by direct compression method.

**Procedure:**

Paracetamol tablets were formulated by direct compression method.

For 1 tablet 325mg of paracetamol, 73 mg of microcrystalline cellulose were weighed accurately and properly mixed together.

Then, 2mg (0.5%) of magnesium Stearate was blended with initial mixture followed by compression of the mixture by direct compression method using 9mm punch rotary tablet punching machine.

**Report:**