

### Simple powders :

- Simple powders contain only one ingredient either in crystalline or amorphous forms.
- These powders should preferably be reduced to fine powders, weighed properly and supplied

in a single dose packet separately.

- wrapping of powders may be single wrapped or double wrapped (lined with waxed paper) according to the properties of the drugs.
- If the drug is resistant to atmospheric conditions, it can be wrapped singly and if sensitive to those conditions, it must be double wrapped.

Ex:- Aspirin powder

procedure:-

Triturate aspirin so as to get fine powder

↓  
weigh the calculated amount of aspirin powder

↓  
wrap each dose in individual powder paper  
and pack it

Compound powders:-

- Compound powders contain 2 or more ingredients supplied in the form of fine state of powder in divided dose
- Each dose is supplied in a single packet.

Ex: Aspirin, paracetamol and Caffeine powder

Aspirin - 300 mg

paracetamol - 150 mg

Caffeine - 50 mg

procedure:

Triturate all the ingredients separately so as to get fine powder

weigh the calculated amount of aspirin powder, paracetamol powder and caffeine powder and mix them in ascending form order of their weights.

wrap each dose in a double wrapped paper.

• Double wrapping is essential for volatile or hygroscopic drugs like Menthol, Thymol, Citric acid, pepsin.

powders enclosed in in cackets :

• cackets are unit dosage form of drugs in which the drug is enclosed in a tasteless sheet formed by powdering a mixture of rice flour and water between 2 hot polished revolving cylinders

→ The water evaporates and sheet of water formed is called Lachets.

→ A lachet offers little protection against light and moisture

→ Now-a-days lachets are replaced by capsules.

There are 2 types of lachets.

1) wet lachets

2) Dry lachets

wet lachets:-

Lower half of the lachet is filled with powdered drug

↓  
Empty upper half of the lachet is moistened with water and pressed over the lower half

↓  
The lachet is dried for 15 mins.

Dry lachets:-

→ Drug powder is filled in the lower half and the upper half is pressed over it just like a capsule

→ They are used for administering the drug with unpleasant taste and in large doses

The boxes are labelled with direction of use

"Immerse in water for few seconds and then placed on the tongue and swallowed with water"

Ex:- Sodium Amino Salicylate Tablets.

### Tablet triturates

- These are powders moulded in to tablets
- They are flat, circular disc & usually contains potent drug which is mixed with lactose, dextrose or some other diluents.
- The apparatus is made up of stainless steel or plastic. It consists of upper & lower perforated plates which is having exactly the same number of holes as that of number of pegs in a lower plate.
- The lower plate also have two large pegs which ensure correct fitting of the plates.
- The moulds are available in several sizes having a capacity ranging from 30 to 250 mg
- Generally 50 to 250 tablet triturates can be prepared at a time from a tablet triturate method

- The powder with diluents are mixed together & made a stiff paste with the help of 60% alcohol
- Then, paste is introduced on upper plate with the help of spatula & fill all the holes & remove Excess.
- The plate is placed over the lower plate. Then little pressure is applied over the top plate which will force the plate move downward, leaving the mould tablet on the projected pegs.
- Then, prepared tablets dried in hot air oven or by keeping in warm place.

### Bulk powders:

- Supplied in bulk quantities
- patients are instructed to take out the exact dose with the help of measuring spoons, or cups according to the directions of the prescriber.

Ex: afe bulk powders are antacids, laxatives,

- Bulk powders are advised to dispense when the drugs are non-toxic because the patients have to measure the dose themselves.

They may do some mistakes while measuring the dose and may create the condition of toxicity.

1) Anhydrous

Ex: magnesium trisilicate compound oral powder

Composition :- magnesium trisilicate - 250mg

chalk - 250mg

Heavy magnesium carbonate - 250mg

Sodium bicarbonate - 250mg

procedure: powders sieved using 250um sieve

↓  
mixed by triturating in mortar

↓  
final product is packed in amber colored glass jar or plastic container with screw cap.

use: Getting relief from the symptoms of indigestion & heart burn.

Laxative, Example:

polyethylene Glycol 3350 NF powder for oral solution

Composition: polyethylene glycol 3350 - 13.125

sodium chloride - 35

sodium hydrogen carbonate

potassium chloride

→ PEG 3350 NF powder for oral solution is an osmotic agent which causes water to be retained with the stool and used for the treatment of constipation.

→ It is supplied in powdered form, for oral administration after dissolution in water, juice.