

*Coating not packaging.

Coating of tablets and multiparticulates

Formula → عبارة عن مكونات + طريقة تحضير

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preformulation → then clarification (such as filtration). → then packaging → protection.

↓
دراسة المادة الفعالة.

EX:
aspirin
يتكسر بوجود الماء
water



لصيف احنا بنحضره باستخرايم ال

Dry granulation.

active ingredient (يعني بي ادوية)

chemical

physical properties

تفيد ما اطلب عليه التصنيع

3) الدواء حساس لوجود الرطوبة أو الأكسجين لصيف بعله
Coating عشان احافظ عليه.
4) التحكم في ال drug release

أهداف ال Coating :

1) إخفاء الطعم السيء.

2) الدواء مستable في ال acidity of stomach.

Coating of tablets and multiparticulates

لے عبارتہ عن Capsules بدون داخلہ زبانی طاہرات (زی دواء Ezit)

- Tablet coating is the application of a coating material to the exterior of a tablet with the intention of conferring ^①benefits and ^②properties to the dosage form over the uncoated variety.
- Coating can be applied to:
 - 1– Tablets (the most commonly coated dosage form)
 - 2– Capsules 
 - 3– Multiparticulates
 - 4– Drug crystals.

Coating of tablets and multiparticulates

Types of coating

There are three main types of coating:

1. Film coating: for tablets, multiparticulates,
capsules, ..
 2. Sugar coating → Ex: spasmopan, mentos
 3. Press (Compression) coating
← على كسب حبة داخل حبة
Compression small tablet
in a large tablet.
- For tablets only

← طريقة تغليفية.

Features	Sugar coating	Film coating
<i>Tablets</i>		
<u>Appearance</u>	Rounded with <u>high degree of polish</u>	<u>Retains contour of original core</u> Usually not as <u>shiny as sugar coat types</u>
Weight increase due to coating materials	<u>30–50%</u>	<u>2–3%</u> of more than 8–10%
Logo or 'breaklines'	<u>Not possible</u>	<u>Possible</u>
<u>Other solid dosage forms</u>	Coating <u>possible but little industrial importance</u> <i>only for tablets</i>	Coating of <u>multiparticulates very important in modified-release forms</u>
<i>Process</i>		
Stages	<u>Multistage process</u>	<u>Usually single stage</u>
Typical batch coating time	<u>8 hours, but easily longer</u>	<u>1.5–2 hours</u>
Functional coatings	Not usually possible apart from <u>gastro-resistant (enteric) coating</u>	<u>Easily adaptable for controlled release</u>

← معظم الأدوية يتبع
Film coating.

Coating of tablets and multiparticulates

Reasons for coating:

1. To provide protection of drug from environment, especially light and moisture ② and oxygen ③
2. To mask taste, odor or color of the drug
3. Masking any batch difference in the appearance of raw materials

4. To modify drug release:

- Delayed release (ex. enteric coating to protect the drug from the gastric environment of the stomach or the stomach from irritation caused by some drugs)

- Extended release properties. → release of drug for long time

5. To aid in identification of product (i.e. colored coating)

6. To improve tablet elegance ((الشكل والظفر

7. To facilitate tablet swallowing

8. To enable easier handling during high-speed filling and packaging of the coated product (improve product flow , increase mechanical strength, minimize dust formation) ①

cross contamination → contamination of product A by product B.

تأخر الـ drug release
بمس
في مكان معين
بالجسم
أجل وتوصل
المعدة
تسهيل
عليه
البيع