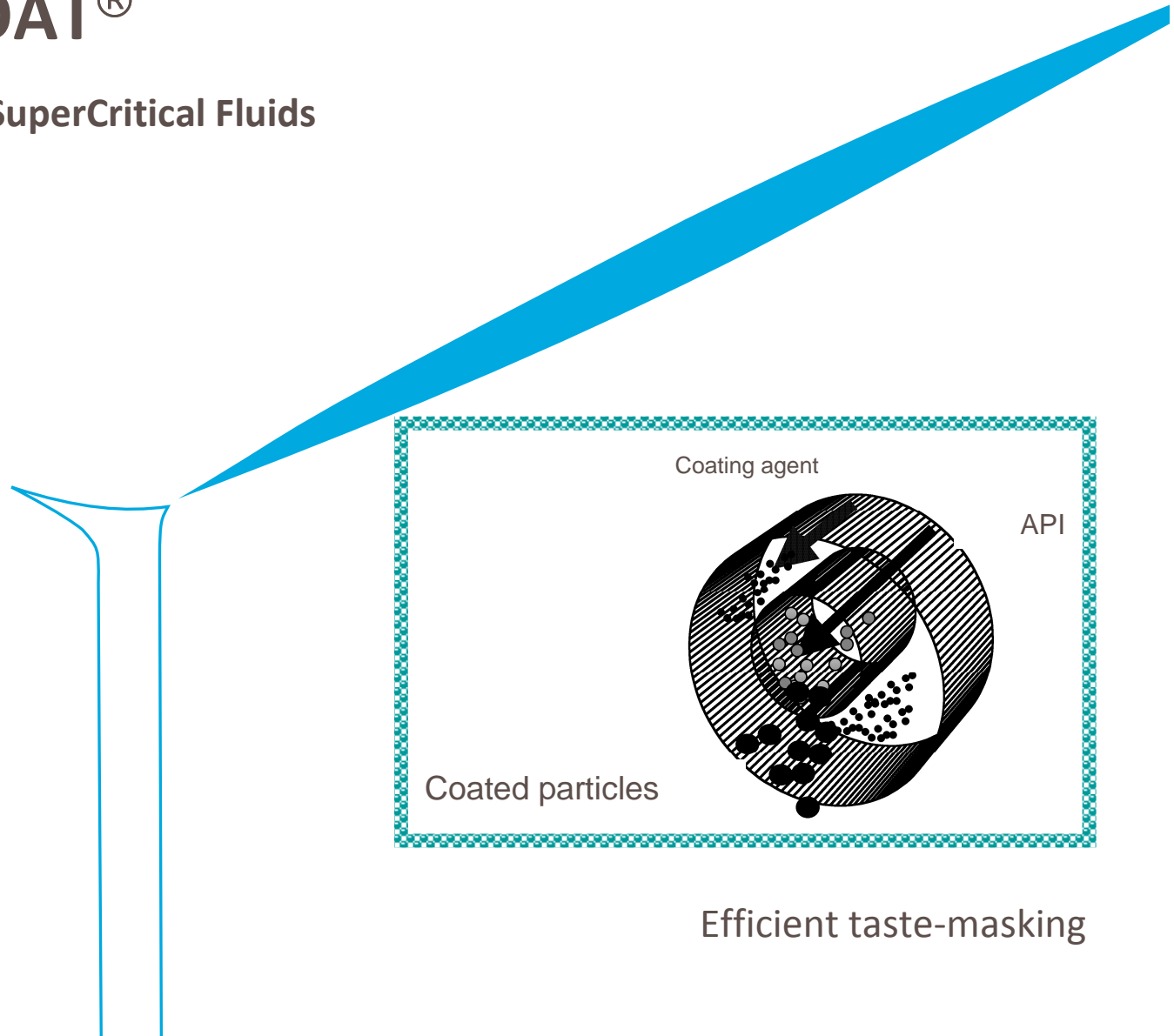


FORMULCOAT[®]

Coating process by SuperCritical Fluids



INNOVATION

by Preformulation Contract Manufacturing

Issue of Bitterness ?

Need a competitive cost process to allow
Life Cycle Management with an Orodispersible formulation ?



FORMULCOAT® has been successfully tested for **taste masking** issue on a wide variety of dry compounds:

APIs

Dry natural extracts

Veterinary products..

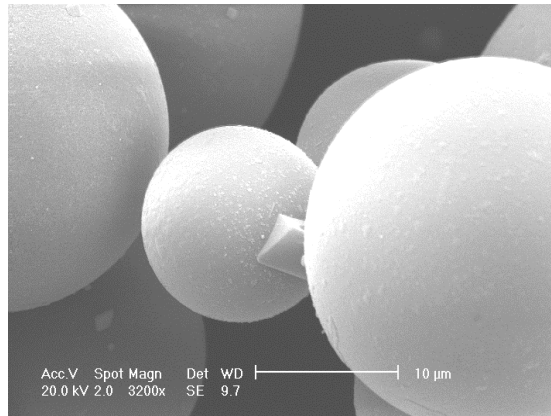


FORMULCOAT® is a mild and **solvent-free process** to efficiently coat all kind of dry powders even small particles

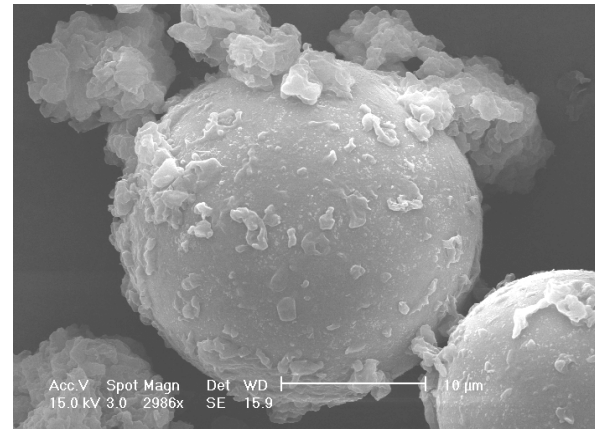


POSSIBILITY TO USE A WIDE RANGE OF LIPIDIC COATING AGENTS

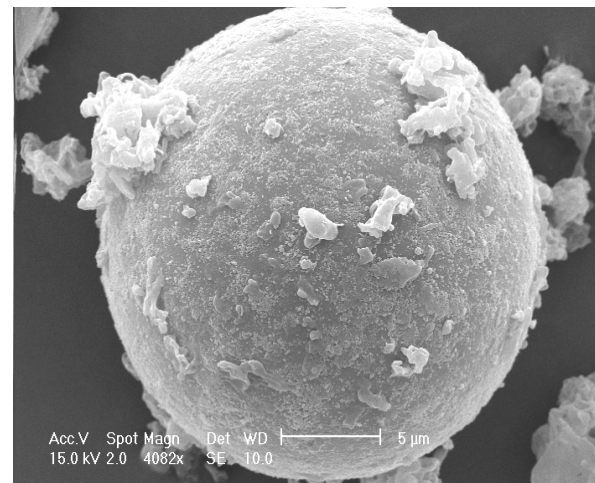
Before coating



Coated with **Monostearate**

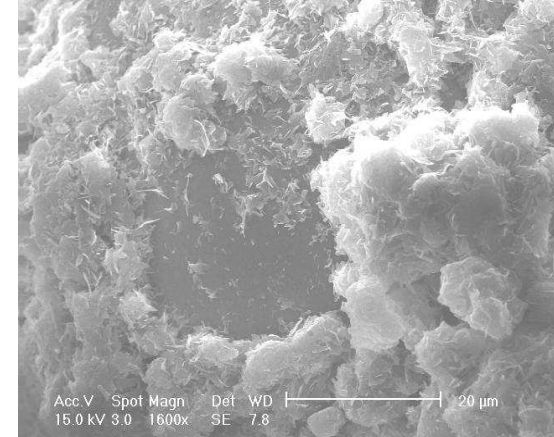
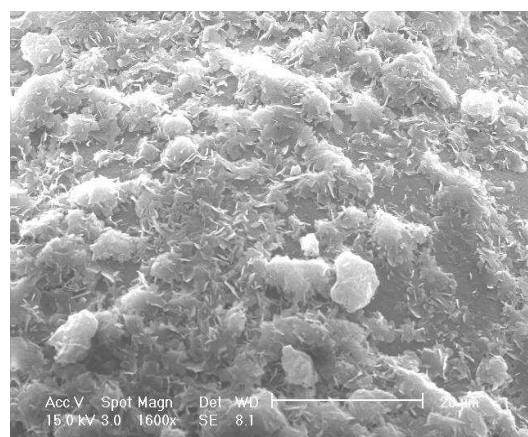
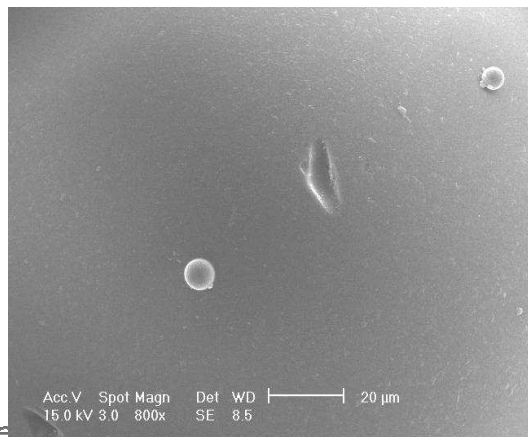
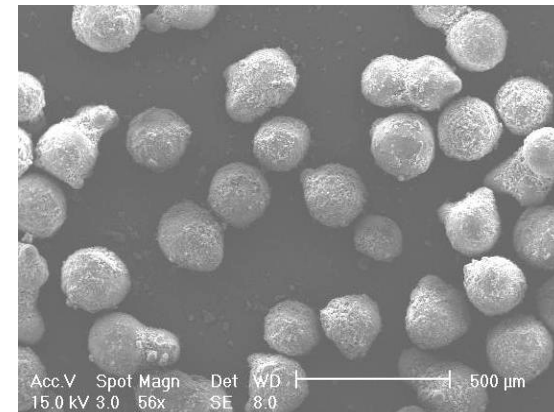
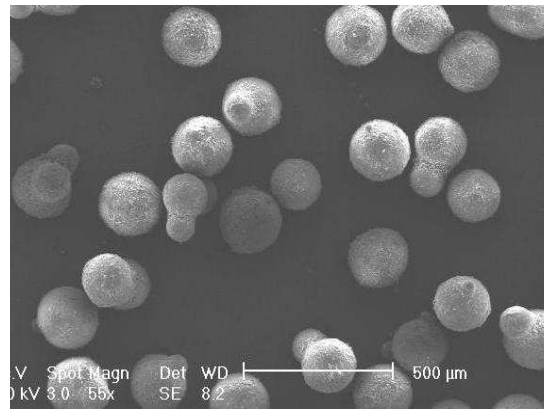
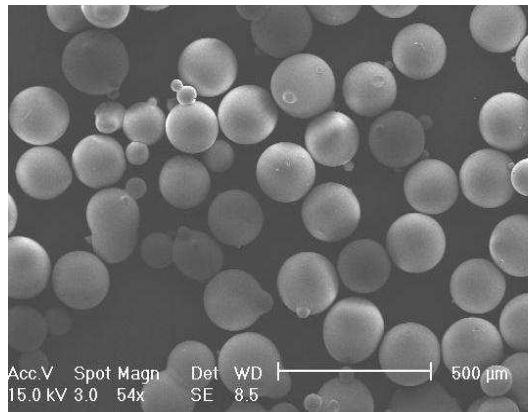


Coated with **Paraffin** **Glass Beads 20µm** Coated with **Precirol**



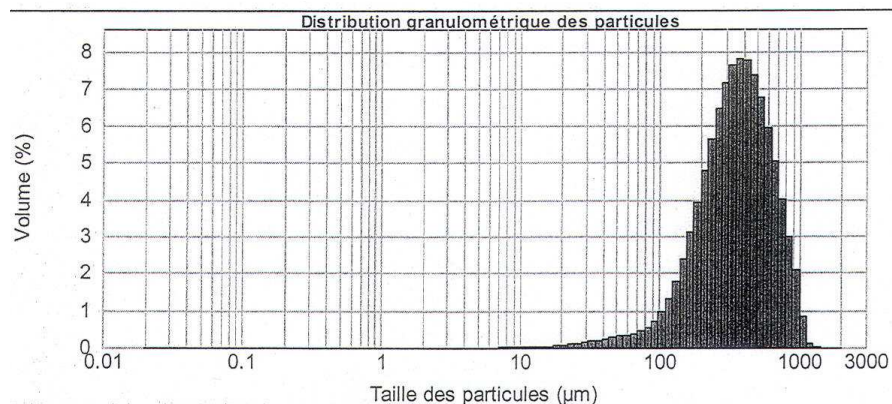
CONTROL of the Thickness of coating layer (200µm Glass Beads – Precirol)

	GB	Test 1 ($1,7 \pm 0,2 \%$)	Test 2 ($4,2 \pm 0,2\%$)
D medium (µm)	204,7	210,8	220,3
e (µm)		3	7,8

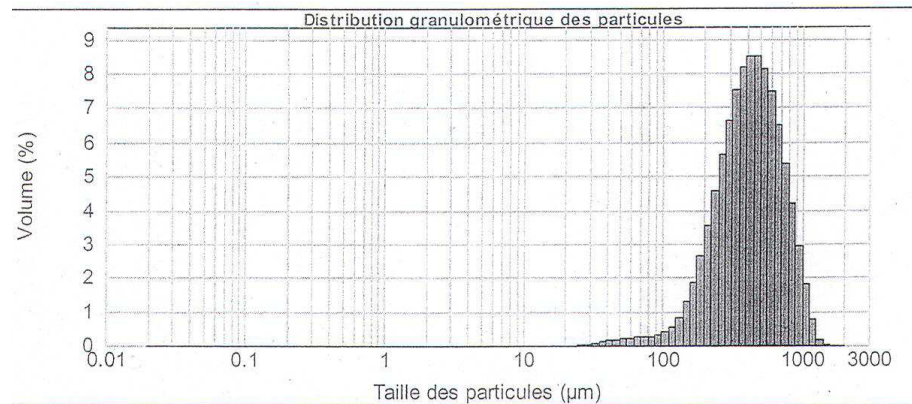


A COATING without AGGLOMERATE

Case Study of Pseudoephedrin / Precirol (10 %)



Résultat moyen PSEUDOEPHEDRINE, mardi 11 avril 2006 10:05:23



Résultat moyen PSEUDOEPHEDRINE + PRECIROL ATO 5 10%, mercredi 12 avril 2006 10:43:15

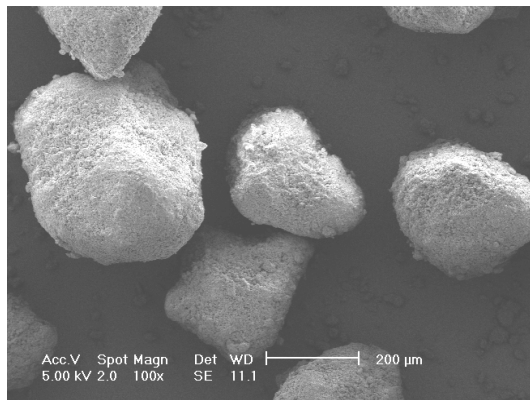
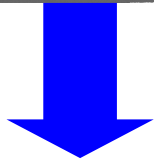
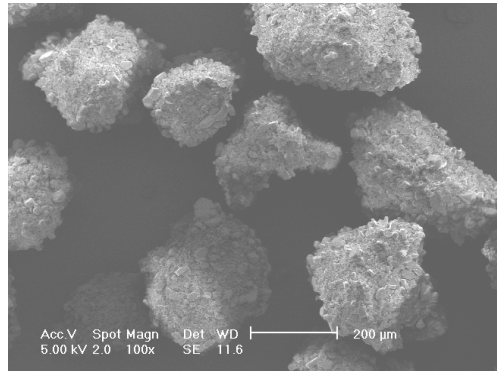
Pseudoephedrin

Coated Pseudoephedrin (10% Precirol)

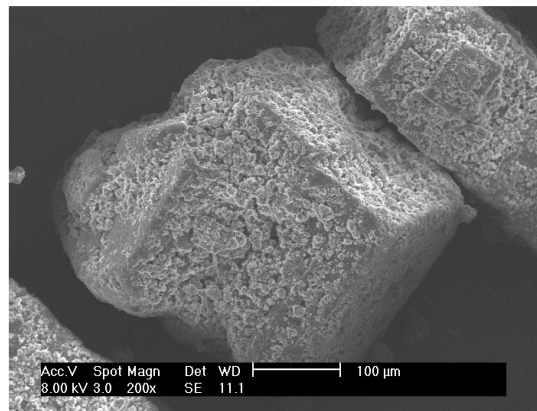
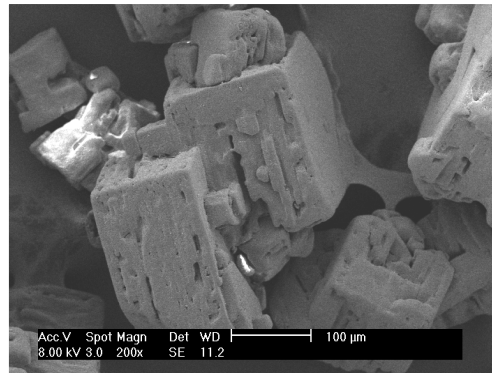
		D_{medium} (µm)	D_{10} (µm)	D_{50}
(µm) D_{90} (µm)				
Pseudoephedrin		398.7		154
359	709			
Coated Pseudoephedrin 10%		465		203
Pierre Fabre Médicament & Santé	423	794		

APPLICABLE on
a large range of MORPHOLOGIES of particles

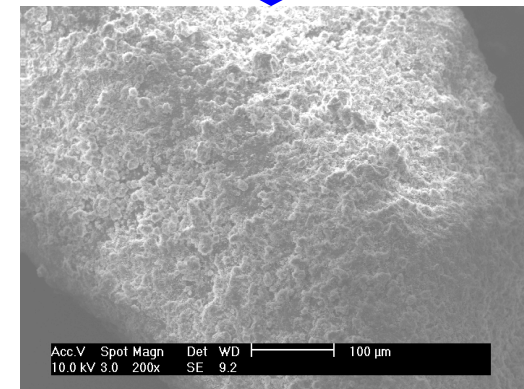
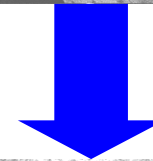
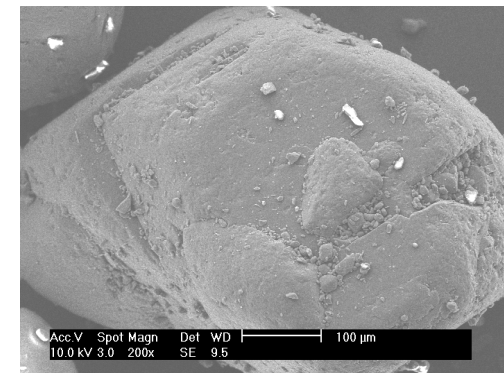
Ibuprofen



Phloroglucinol

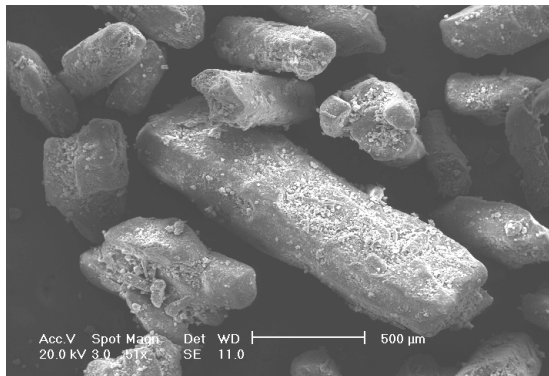
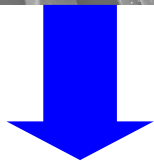
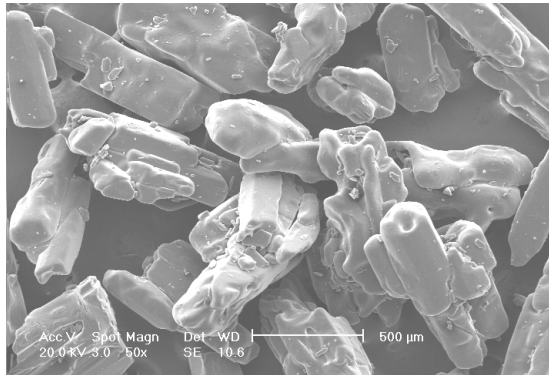


Acetaminophen

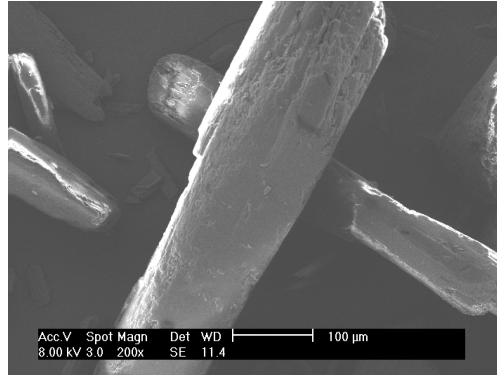


APPLICABLE on a large range of MORPHOLOGIES of particles

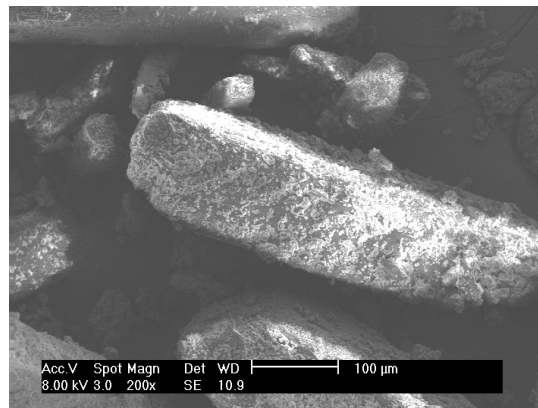
Pseudoephedrine



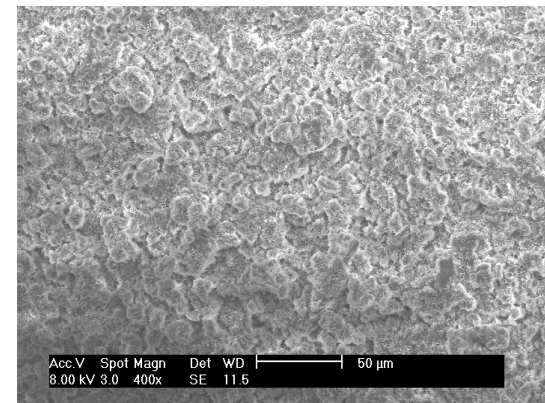
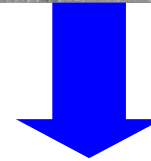
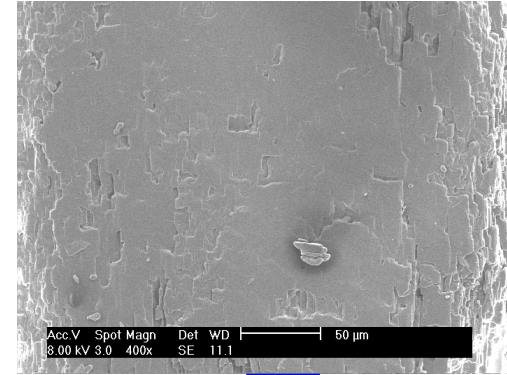
Aspirin



FORMULCOAT®



Aspirin (focus)



FORMULCOAT® combines the convenience of an **effective taste masking** without **sustained release effect**



FORMULCOAT affords an **effective taste masking** and consequently permits to obtain formulations **without bitterness** even for **orodispersible forms**.

Our **SuperCritical Fluids Division** has been developing **coated API** for more than ten years.

Our comprehensive **experience and know-how** is at your disposal,
with our **patented FORMULCOAT® technology**.



Preformulation by contract development & manufacturing

A SERVICE ADAPTED TO THE CUSTOMER'S NEED



Pierre Fabre
Médicament

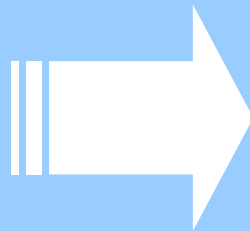
API's in development or already marketed

FEASIBILITY STUDY (4 weeks)

Preliminary study of the coating agent in SC CO2

Production and supply of batches

Analysis: Content and homogeneity (HPLC)



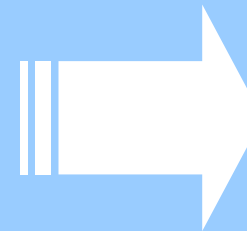
OPTIMISATION (4-8 weeks)

Ratio API/coating agent

Scale-up

Process parameters

Additional analysis (dissolution..)



CLINICAL BATCHES PRODUCTION

cGMP conditions



PIERRE FABRE MEDICAMENT

SuperCritical Fluids Division

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