

## Rapidfilm® Technology meets the special needs of specific patient groups

Rapidfilm® also known as orodispersible film (Ph.Eur., EMA) soluble film (FDA):

Oral film, thin strip, flash-release wafer, quick-dissolve film, orally dissolving film, rapidly dissolving film, fast dissolving oral thin film

Rapidfilm® Technology is the perfect formulation for children and elderly patients.

## Benefits

For Patients	For Medical Use	Development & Manufacture
<p>Ease of administration</p> <ul style="list-style-type: none"> <li>• can be taken without water</li> <li>• no need of chewing or swallowing</li> </ul>	<p>Guaranteed dose and treatment</p>	<p>Fullfills regulatory requirements (PIP)</p>
<p>Tolerability and proven patient acceptance*:</p> <ul style="list-style-type: none"> <li>• Acceptability</li> <li>• Swallowability</li> <li>• Palatability</li> </ul>	<p>Provides faster onset of action (buccal application)</p>	<p>Variety of doses with only one formulation</p>
<p>Safety:</p> <ul style="list-style-type: none"> <li>• exact dosing – no spitting out possible</li> <li>• no choking</li> <li>• child resistant and single packaging</li> </ul>	<p>Patient can be given medication lying in bed and without water</p>	<p>Variety of films for different administration routes:</p> <ul style="list-style-type: none"> <li>• oral</li> <li>• lingual</li> <li>• sub-lingual</li> <li>• buccal</li> </ul>
<p>Prompter relief due to faster onset of action via buccal route</p>	<p>Reduces number of drugs which have to be chewed or swallowed</p>	<p>New innovative products for your portfolio</p>
	<p>Provides solution for the unmet specific needs of the patient group</p>	<p>New technology provides opportunities for life cycle management</p>
	<p>Type, frequency and dose of existing medication could remain unchanged</p>	



\*Rapidfilm serves your PIP and a clinical trial with 150 small infants in the Childrens University Hospital in Düsseldorf/Germany showed proven patient acceptance. Ask for the results!

## Rapidfilm® Technical Facts



Area: 6 - 10 cm<sup>2</sup>  
API content: 50 - 100 mg



Area: 3 - 6 cm<sup>2</sup>  
API content: 1 - 50 mg



Area: 1 - 3 cm<sup>2</sup>  
API content: 0,5 - 10 mg

Water/ethanol based drug dispersion in hydrophilic polymers

- Polymers
  - Polyvinyl alcohol (PVA)
  - Polyvinyl pyrrolidone (PVP/Kollidon)
  - Cellulose and derivatives
  - Starch and derivatives
  - Polyacrylic acid (Carbopol)
  - Alginates
- Plasticizers
  - Residual water and ethanol
  - Glycerol
  - Polyethylene oxide (PEO/PEG)
  - Propylene glycol
- (Fillers/Flavours/Taste Masking)
- Process Temperatures
  - 50 – 120°C