

# Label Coatings for more Impact & Added Value

Andre Soterio, Segment Manager Labels Europe, ACTEGA, September 2019



### Agenda

- ACTEGA Terra A member of ALTANA
- Coatings between quality, price and performance
- The value of coatings
- Specifying your label coatings



### A member of ALTANA



- ✓ is a global specialty chemical group
- ✓ has more than 6,400 employees to fulfil customer requirements
- ✓ consists of four divisions: ECKART, BYK, ELANTAS, ACTEGA



### ACTEGA Terra



- ✓ is a European market leader for overprint varnishes and primers
- develops and produces

   a broad product
   program for packaging,
   labels and graphic arts



# Coatings between quality, price and delivery time



### Quality, price or time



Quality Price Time Quality Price Time

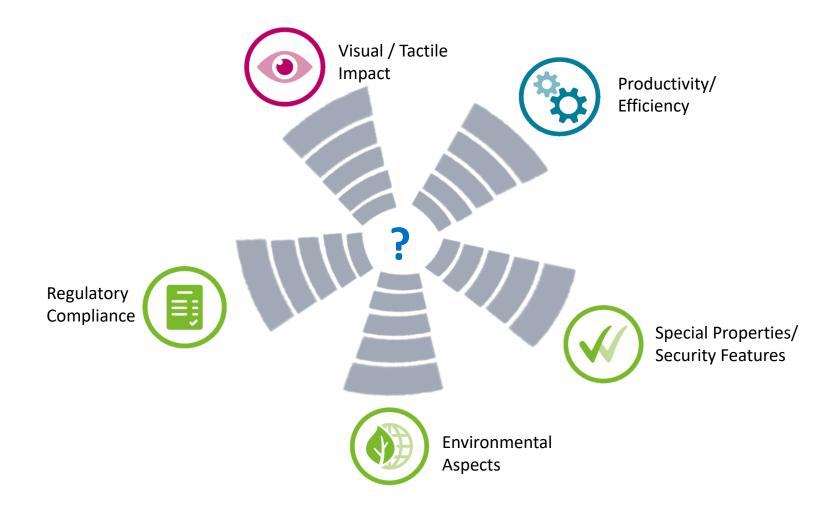
Priority on quality and price will affect time

Quality and a short delivery time will impact the price

If price and time are prioritized, quality will be affected



# What is important for you?



### The value of coatings



# More than label protection



#### Protection

- Coatings protect the ink from abrasion and scratches.
- Coatings take over quality control for the print image.



#### **Function & Safety**

- Coatings provide printed products with valuable properties (e.g. anti-curling).
- Coatings enable a faster printing and further processing.
- Coatings offer safety features, e.g. against migration.

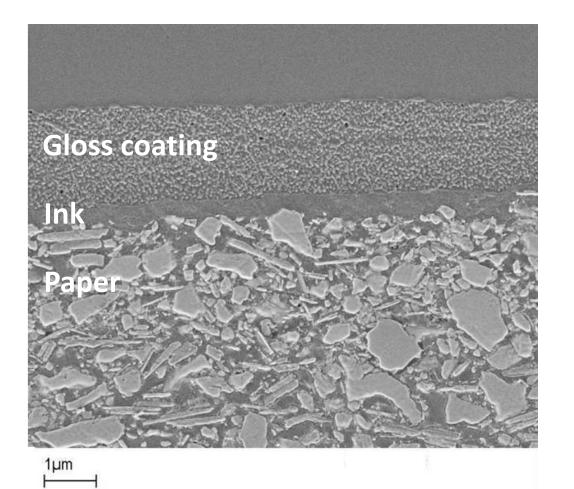


#### Finishing

- Coatings provide the printed product with the required finishing.
- Coatings send out multi-sensory signals and differentiate from competition



# Little amount – great effect



- ✓ The coating is transparent
- ✓ The coating is "the last on the top"
- ✓ The coating defines the surface

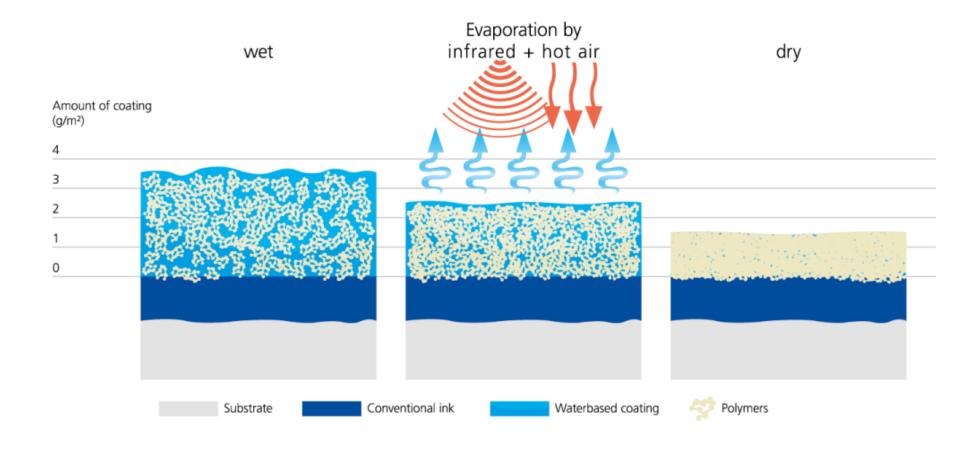


# Water-based coatings (1/2)

Ingredients	Functions
Styrene acrylate resin	Raw material that provides gloss
Acrylate dispersions	Functions, e.g. running characteristics, drying, abrasiveness
Waxes	Scuff resistance
Silicone	Defoaming
Wetting agent	Wetting
Ammonia	Dissolution of the resin
Matt pigments*	Matt level
Water	Viscosity adjustment / solvent



### Water-based coatings (2/2)



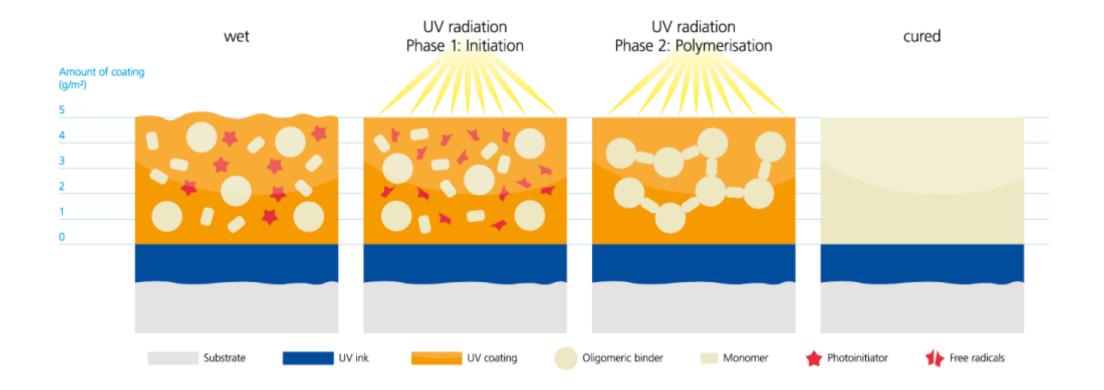


# UV coatings (1/2)

Ingredient	Function
Epoxy acrylate	Adhesive agent
Monomers	Reactive diluent
Amine	Oxygen blocker
Photoinitiator	Reaction activator
Additive	Foaming and running characteristics
Matting agents*	Matt level



# UV coatings (2/2)





# Requirements according to label type (1/2)

#### Pressure Sensitive Labels

- High heat resistance
- Good scuff and chemical resistance
- Foil stampable
- High reactivity (UV)
- Benzophenone-free and low odor
- For the indirect food contact
- For various effects, e.g. hammertone
- Outdoor protection

#### Wet Glue Labels

- Barrier against high in alcohol content (spirits)
- High chemical and heat resistance
- High wet block and scuff resistance
- Excellent alkaline penetration
- Anti-curling and foil stampable
- Tactile and visual effects
- For the direct food contact (FoodSafe)







# Requirements according to label type (2/2)

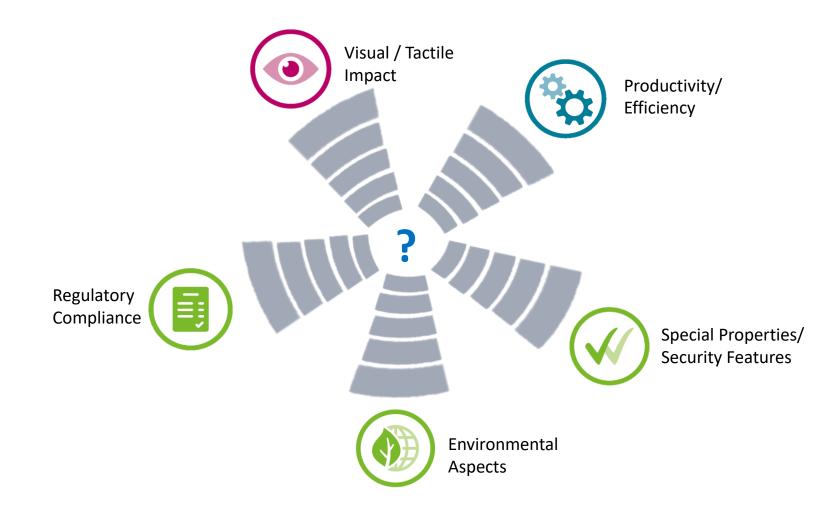
#### In-mold Labels

- High heat resistance
- High scratch resistance
- High wet block resistance
- Anti-curling and static loading
- For pasteurization, overlapping and hot filling
- Tactile and visual effects
- For the direct food contact (FoodSafe)





# What is important for you?





# Specifying your label coatings



### Visual and tactile impact



#### What is the strength and impact of the coating's visual or tactile effect?

- ✓ What is the purpose of finishing?
- ✓ Which coating technology will help to achieve this (e.g. AQ vs. UV)?
- ✓ What kind of visual finishing is needed (e.g. dull matt, metallic, pearlescent, drip off)?
- ✓ What kind of tactile finishing is needed (e.g. smoothness, roughness)?
- How well can the coating be used to highlight specific artwork elements?
- How well can the coating support an impression of luxury/naturalness/superior quality?



### Application examples

- Matt and/or gloss coatings
- Metallic coatings
- Pearlescent coatings
- Drip off effects
- 3 dimensional effects
- Soft and velvet touch coatings
- Braille/relief coatings
- Structure effects
- Embossing effects
- Sand effects
- Hammertone effects





# Productivity and efficiency



#### How efficient is the coating application and the further processing?

- ✓ What type of printing process is used?
- ✓ What is the target press speed?
- ✓ Is special equipment required?
- ✓ How fast do coatings or inks need to be cured or dried?
- ✓ Which coating properties are essential for production and logistics (e.g. high mechanical persistence)?
- ✓ What are the further processing steps (e.g. foil stamping, die cutting, embossing, TTR)?
- Are there particular in-line processing needs?



# Special properties and security



#### Which functional characteristics or security features must be considered?

- Are there any special coating properties needed (e.g. inkjet printability)?
- ✓ Which security features must be implemented?
- ✓ Is the label used to prevent counterfeiting?
- Do we need to include watermarks, holograms or tactile effects?



### Application examples

- Anti-curling effect
- Barrier properties
- Heat-resistance
- Foil stampable
- Inkjet overprintable
- Anti-counterfeit
- Encoding





#### Environmental aspects



#### What is the ecological impact concerning production and disposal?

- ✓ Is there any sustainability viewpoint to be considered?
- Does the label have to be completely compostable or climate neutral?
- ✓ Should coatings be based on renewable resources?
- Are there any recycling requirements?



# Regulatory compliance

#### What regulatory compliance does the label solution require?

- ✓ Which legal requirements must be followed (FDA, Nestlè, EU)?
- ✓ What are the important regulations, directives, ordinances or practices?
- ✓ Must the coating be appropriate for the indirect or direct food contact?
- Do we have to comply with safety requirements of the toy industry?
- What coating technology is used (AQ vs. UV)?
- Is there any appropriate manufacturing process in place?
- Are proper quality assurance measures defined?



### What is important for you?



.... and get a better picture of your optimal coating solution.





# Any questions?

