

WIPES Academy Instructor: Chris Plotz, Director of Education & Technical Affairs, INDA

COURSE AGENDA

Monday, June 27, 2022

- 7:30 am Breakfast
- 8:00 am Introductions

8:20 am Section 1: Brief Overview of Wipes

- What is a wipe?
- Early wipes
- Growth of wipes
- Wipe classifications Consumer and Industrial
- Equipment evolution
- Desired characteristics
- Why use nonwovens in wipes
- Wipe elements
- Group Exercise Hand's on the wipes
- 9:35 am Break

9:50 am Section 2: Nonwoven Substrates for Wipes – Materials and Processes

- What is a nonwoven?
- Wipes menu
- Raw Materials: fibers & adhesives
- Key process elements
- Control of fabric properties
 - Mechanical
 - Liquid
- Examples of key processes
- 11:15 am Break





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11:30am Section 3: Liquid Ingredients A - Z . . . Anti-aging to Zinc Oxide

- Most common liquid ingredients special focus on:
 - Surfactants
 - Preservatives
 - Water
- Selected "Special" of the hundreds A to Z
- Liquid logistics, mixing and delivery
- 12:45 pm Lunch

1:45 pm Section 4: Packaging Materials

- Package types
- Nonwoven substrate format
- Closure types
- Tradeoffs
- 2:30 pm Break

2:45 pm Section 5: Wipe Converting Processes: The "-ings"

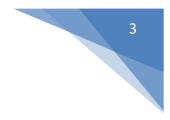
- Unwinding
- Slitting
- Web Handling
- Turning
- Wetting
- Folding
- Interfolding
- Cutting
- Stacking
- Packaging
- Rolling
- Perforating
- Inserting
- Wetting
- 4:05 pm Break

4:20 pm Section 6: Wipe Development & Manufacture - Bringing It All Together

- Basic wipe development "skeleton" steps
- Raw material flows
- Nonwoven, liquids and packaging







- Flat-Pack line
- Canister line
- Case Study: Baby Wipes in North America, 1970 to Current

5:20 pm Section 7: Cost Effective Production/Sustainability

- General thoughts on sustainability as it pertains to wipes
- Product design drivers
- Logistics and materials efficiency
- Production related drivers
- 5:50 pm Recap of the Day
- 6:00 pm Class Adjourns
- 7:00 pm WOW 2022 Welcome Reception TBA

Tuesday, June 28, 2022

- 7:30 am Breakfast
- 8:00 am Section 8: Quality, Stability, Recalls and Related Matters
 - Quality and stability imperative
 - Philosophy
 - Practice
 - What can go wrong
 - Protocols
 - Quarantine
 - Recalls

9:05 am Section 9: Wipes Market Statistics and Data

9:35 am Section 10: Current "Hot topics"

- Contemporary topics
- Open discussion
- 10:15 am Break







10:30 am Section 11: Consumer/Customer Understanding

 Quick review of conventional methods
 Comments on private label vs. branded business

10:55 am Section 12: Influential Issues, Regulations and Flushability

- Regulations
- Registrations
- Certification programs
- Flushability & Single-Use Plastics Chris Plotz, Director of Technical Affairs, INDA
- Disposability
- 12:00 pm Group Exercise
- 12:30 pm Recap WIPES Academy
- 12:50 pm Course Adjourns/Lunch

INDA's WIPES Academy is a two-day course devoted to the manufacturing, handling and treatment of nonwoven substrates used for disposable wipe applications. The course will begin with a discussion about the various materials and processes used to create wiping substrates for disposable consumer applications. Your training follows the substrate as it travels from the roll through the treatment and converting processes and ultimately the packaging process intended by its end-use. The course will also examine manufacturing concerns ranging from design drivers and preservative options to sustainability challenges and the latest in flushability advancements and government regulations. INDA's Director of Market Research and Statistics will provide market data, trends and a peek at the industry's future.

