

Cobalt-free Driers for Alkyd Coatings: Optimal Selection & Use

A 90 min online short course

By Johan Bieleman



To register, please visit: [Cobalt-free Driers for Alkyd Coatings: Optimal Selection & Use](#)

Cobalt driers being under scrutiny, industry is under pressure to find less toxic alternatives. At present, no ready-to-use solution works perfectly and success is in the ability to combine driers together for an efficient multi-step effect. In this context, better forget about the trial-and-error approach and review how the various driers work to make educated decisions!

Ease your cobalt-free driers selection by reviewing how to improve alkyd coatings drying & hardness performance with an optimal selection and use of combination of driers (Mn, Ca, Zr...) in waterborne and high-solids formulations.

Johan Bieleman will share his expertise making efficient cobalt-free surface & auxiliary driers combination to meet today's top challenges (optimal tack-free time & gloss...)

Why you should attend:

1. Open up to finer drying / hardness optimization with cobalt alternatives by better understanding the role of metal ions on **autoxidation/cross-linking processes**
2. Clarify **how alternative driers (Mn, Fe, Cu, V, Ce...) compare against Cobalt** in term of catalyst, film hardness, color, skin formation... to build effective combination
3. **Troubleshoot faster** problems (loss of dry, wrinkling, water retention, soft film, poor gloss, discoloration, durability...) using the right surface & auxiliary driers at the **right loading**



Who is it for?

Formulators, technicians, managers involved in the development of air-drying waterborne and high solids alkyd paints, inks and varnishes.

Outline

1. **Introduction**
2. **Autoxidation and cross-linking of air-drying WB- and SB- paints**
 - Autoxidation drying process
 - Role of metal ions in autoxidation reactions
3. **Key characteristics of main siccatives**
4. **Application of drier combinations**
5. **Optimizing drier selection for waterborne alkyd paints**
 - Main parameters affecting drying performance
 - General drier combinations for WB systems
6. **Optimizing drier selection for high solids alkyd paints**
 - Main shortcomings of high solid paints in relation to drying
 - Proven successes for high solid paints
 - Effect increased by cobalt drier
7. **Replacing cobalt driers**
 - Main reasons for reviewing cobalt drier
 - REACH status of cobalt carboxylates
 - Potential replacements for cobalt drier
 - New developments
8. **Problem solving by drier optimization**
 - Poor tack-free time
 - Poor total dry
 - Loss-of-dry
 - Poor gloss in WB alkyds
 - Soft film in HS alkyd
9. **Summary**

At the end of the training there will be a Q&A Session where you can pose questions to Johan Bieleman.

A transcript of all the questions & answers will be made available after the event.



Presented by Johan Bieleman



Johan Bieleman has been working in the coating industry for more than 35 years. After holding management positions in the **R & D and marketing** for companies such as *Servo-Delden BV / Elementis Specialties*, *Ciba/EFKA*, *CP Kelco*, he is now the owner of *Delden Advice BV*; a consultancy company specialized in coating technology.

His main career focus has been on the development and application of **colorants, surface active agents, and catalysts**, applied in paints, inks, plastics and related areas. In the course of his professional activities, Johan visited hundreds of paint companies, located all over the world.

Johan Bieleman is internationally known by the numerous technical articles and papers, most of these dealing with surfactants, colorants, driers and coating additives. He is the editor of "Additives for Coatings", a 400 pages book, published by Wiley-VCH in 2000.

Johan Bieleman was educated as an engineer in organic chemistry and concluded his studies in paint and polymer technology in 1971. He is an active member of the *Dutch Society of Paint Technology*.

Past attendees feedback

Ann-Charlotte H. , from Engwall o. Claesson AB:

"Very good! The course gave a good overview of the subject. "

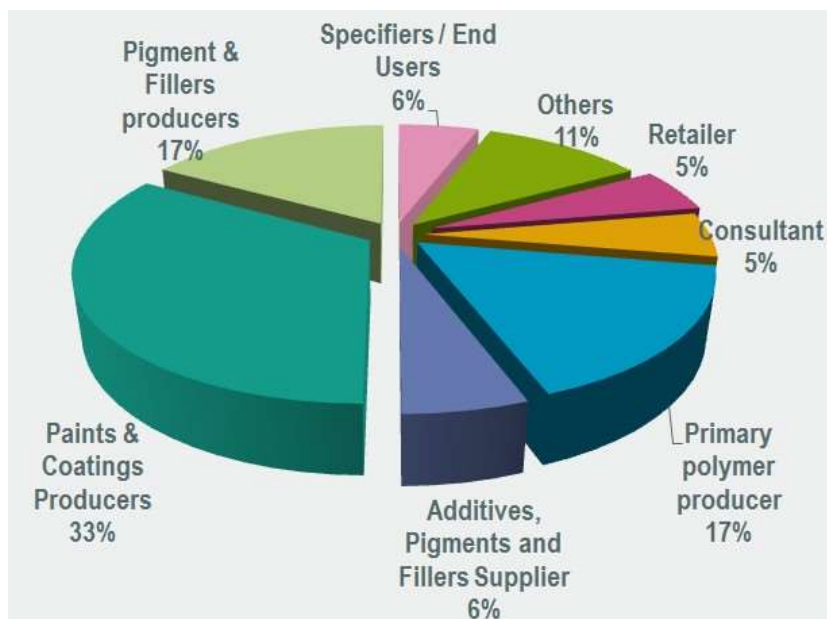
Bill Z. , from Seymour of Sycamore :

"It verified that we are using the correct driers for our alkyd and offered tips for a wrinkling issue."

Ville T. , from Tikkurila Oyj:

"Very acute topic!"

Past attendees profile



- R&D – Applied/Formulation/ Product development- 72%
 - Technical services/Customer assistance-17%
 - Basic Research - 11%
- Cabot, DSM Coating Resins, PPG Industries, Asian Paints Ltd, Lorama Inc, Silysiamont, Engwall o. Claesson AB, Alba ICI Paints, Rust-Oleum, PCCR USA, Inc., PPG, PQ Corporation...*

Next session: Wed. Sep 28, 2016 at 10 a.m. ET / 4 p.m. CET - [Your local time](#)

Fee:

	Regular Access	Group / Multi Access
Number of attendees	Up to 3 attendees	Up to 10 attendees
Number of connections (1 Internet Access)	1 connection	Up to 3 connections
Fee (Currency Converter)	€ 290	€ 580

SpecialChem is not accountable for users' costs linked to participating in the e-Training Course, including but not limited to the phone and Internet connection fees. We provide local phone numbers when available.

Your registration includes:

- **Pdf slides** at least 24h before the live session
- **1h online short course** by an independent expert
- Live interaction with the expert during the **30-minute Q&A session**
- **Q&A Transcript** when you submit your feedback on the course
- **Expert contact details** to further discuss your projects

Why train with SpecialChem?

- Our 500 000+ members from the chemical industry help us **tailor trainings to your needs**
- Our course catalogue has been refined over the years (since 2003) to improve **pedagogy & content quality**
- **2000 of your peers** are trained by us every year
- **97% satisfied attendees** in 2015



Tips to optimize cost of attending

- 1- **Attend with your colleagues**: a REGULAR access allow 3 attendees sharing the same connection
- 2- **Book 2 sessions** at the same time; you will get 25% off the cheapest one.
- 3- Purchase **Online Course Credits** in advance, you can save
 - ✓ up to 30% with the 5 OC Credits option
 - ✓ up to 55% with the 10 eOCredits option.
- 4- Get a **12-month unlimited access** to all Online courses – anyone from your company can use this access

Contact us for more details (online-courses@specialchem.com)

Attending an Online Course is EASY !

