We will start soon…

To make this call most efficient for everybody, we have **muted** your phones.

For questions, kindly use the **chat function**.

Should you have trouble hearing us, kindly choose **"use computer for audio"**. Should there still be issues, kindly try **reconnecting** to the webinar.

Your **hosts** for this call

Hydropalat® WE 3225

Excellent substrate wetting with pronounced defoaming characteristics

Maurice Epple
Presenter

Andrea Schamp/
Kerstin Schurig
Chat

BASF
We create chemistry

Hydropalat® WE 3225

Silicone based wetting agent with pronounced defoaming action

Ludwigshafen, April 29th, 2020

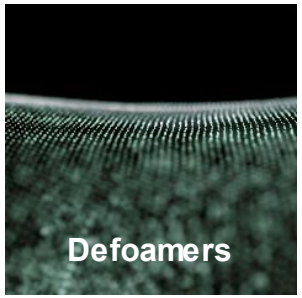
Maurice Epple

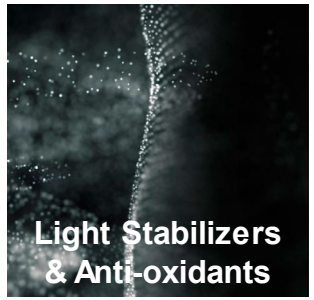
Technical Sales
Formulation Additives
EMEA

Agenda

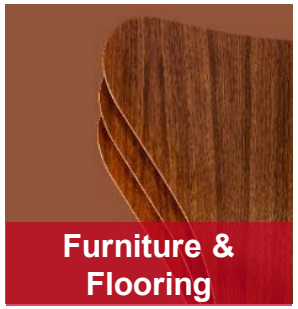
1. Introduction
2. Performance Highlights
3. Summary

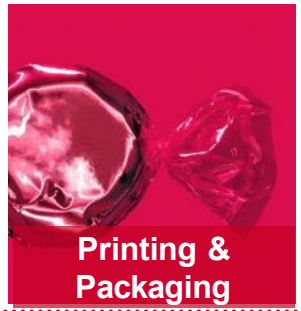
Our comprehensive portfolio enables solutions for various industries

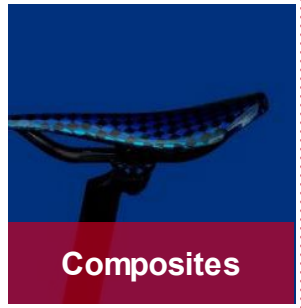




BASF is the premiere provider of **Performance & Formulation Additives** for the paints and coatings industry







BASF
We create chemistry

Strong brands to empower your business

Water-based brands	Application	Solvent-based* brands
Dispex® / Dispex® Ultra	DISPERSING AGENTS	Efka®
Foamaster® / FoamStar®	DEFOAMERS	Efka®
Rheovis® (organic) / Attagel® (clays)	RHEOLOGY MODIFIERS	Efka®
Hydropalat®	WETTING AGENTS	Efka®
Loxanol®	FILM-FORMING AGENTS	Efka®
Tinuvin® / Lignostab®	LIGHT STABILIZIERS	Tinuvin® / Chimassorb®
Irganox®	ANTIOXIDANTS	Irganox® / Irgafos® / Irgastab®

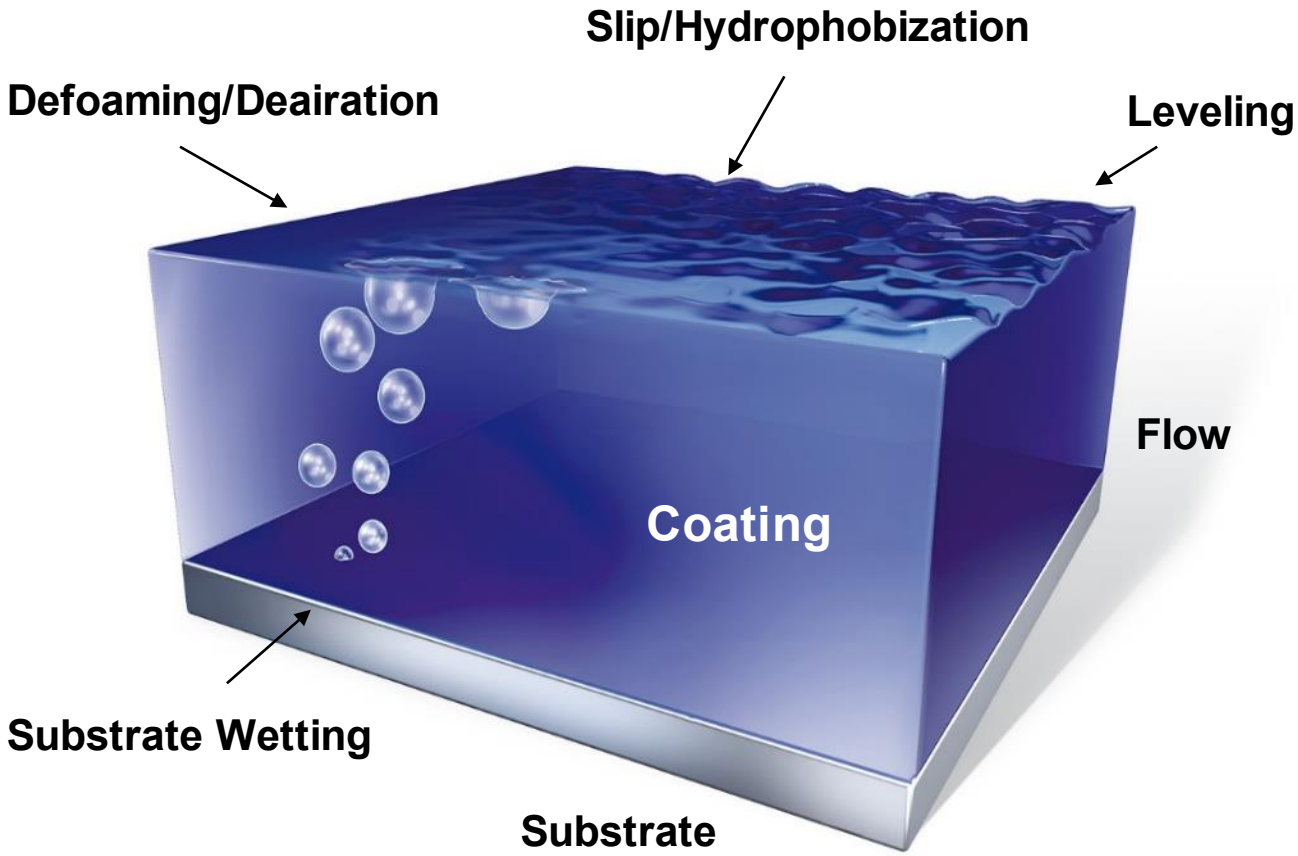
*Efka® includes also High Solids and 100% Solid Systems

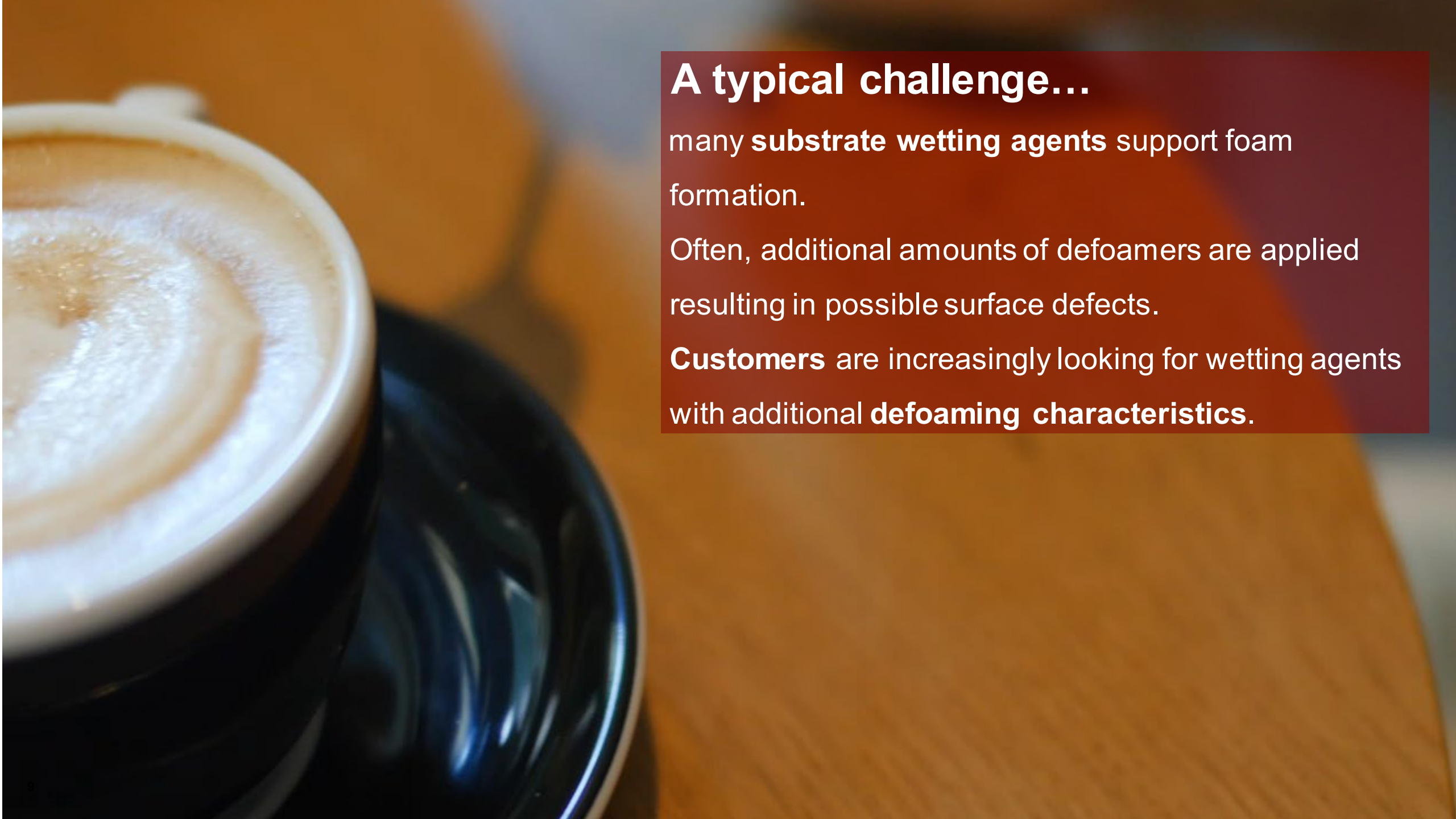
Wetting agents and surface modifiers: BASF portfolio

Chemistry	Product Range	Characteristics
Alkoxylated surfactants	Hydropalat®	low foaming substrate wetting agents for waterborne applications
Silicone surfactants	Hydropalat® Efka®	Substrate wetting agents with generally very low static surface tension
Sulfosuccinate	Hydropalat®	Cost effective substrate wetting agent with excellent dynamic surface tension decrease
(Fluorinated) polyacrylates	Efka® Hydropalat®	high performance acrylate leveling agents for water borne and solvent borne applications
Star shaped Polymers	Hydropalat®	Wetting agents based on special polymers

Wetting agents and surface modifiers can influence several coating properties

- (Substrate) Wetting
- Flow & Leveling
- Gloss
- Foam / Deaireation
- Slip / Antiblocking
- (Intercoat) Adhesion





A typical challenge…

many **substrate wetting agents** support foam formation.

Often, additional amounts of defoamers are applied resulting in possible surface defects.

Customers are increasingly looking for wetting agents with additional **defoaming characteristics**.

…a simple solution

Hydropalat® WE 3225 is a silicone based wetting agent with pronounced defoaming action.

Hydropalat® WE 3225

Silicone based wetting agent with pronounced defoaming action

Application:

Hydropalat® WE 3225 is a silicone based wetting agent with pronounced defoaming action for all kinds of aqueous spray coating formulations.
It combines excellent compatibility and wetting action with defoaming properties.

Performance highlights:

- Excellent substrate wetting
- Eliminates surface defects caused by craters or air bubbles
- Pronounced defoaming characteristics
- Excellent wood grain accentuation
- Low VOC and odor

Characteristic Values:

Density at 20°C	~ 1.02 g/cm^3
Viscosity	~ 150 mPa·s

BASF
We create chemistry

Agenda

1. Introduction
2. Performance Highlights
3. Summary

Hydropalat ® WE 3225

Product benefits

- Excellent substrate wetting
- Elimination of surface defects caused by craters or air bubbles
- Excellent wood grain accentuation
- Low VOC and odor

BASF
We create chemistry

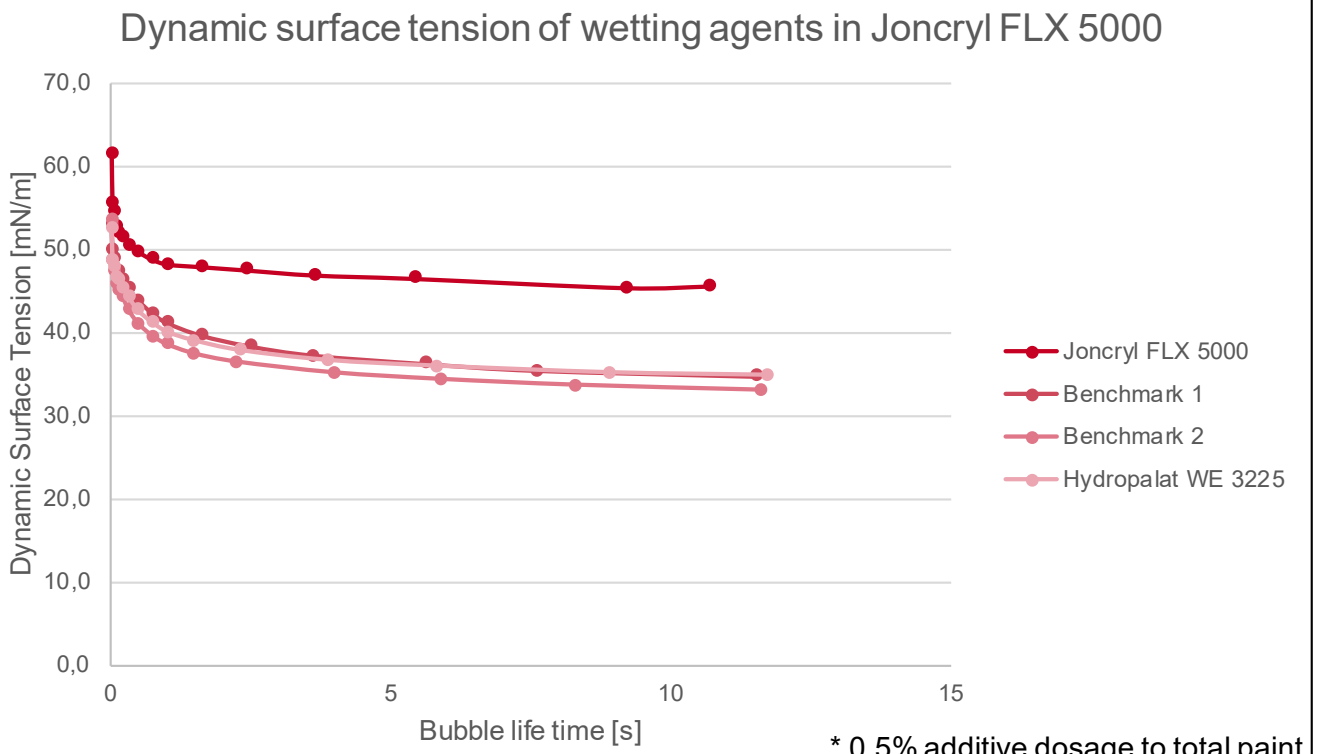
Customers have told us that Hydropalat® WE 3225 has shown multiple benefits in …

…printing & packaging

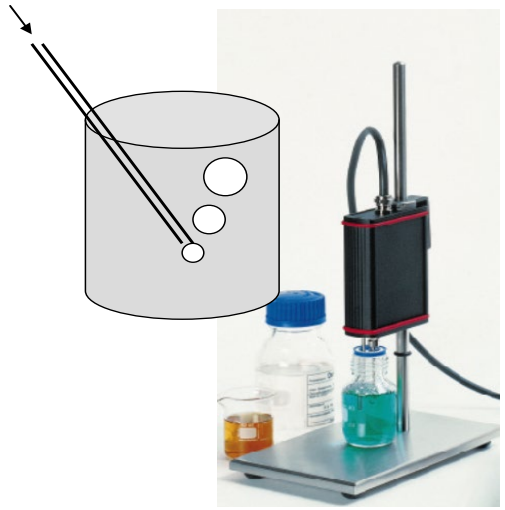
…furniture & flooring

…automotive & industrial

Reduction of surface tension



* 0.5% additive dosage to total paint



Dynamic surface tension measurement gives insight information on surface tension reduction and dynamics of a surfactant.

Hydropalat® WE 3225 shows similar surface wetting compared to competition.

BASF
We create chemistry

Defoaming test formulations

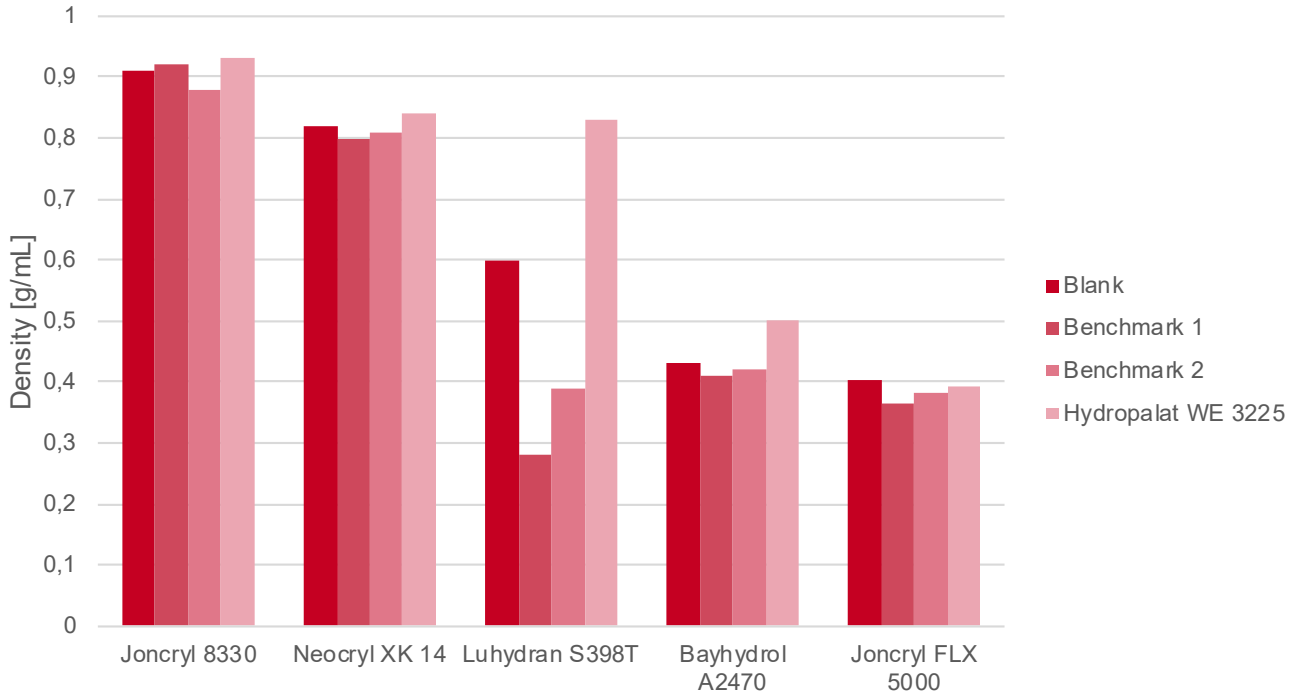
Joncryl® 8330	84.0
DPnB	6.0
BCS	0.5
Water	4.5
Rheovis® PU 1291 (50% in water)	0.5
Di-Water	4.0
Total	95.5

NeoCryl XK-14	
resin	81.3
Butyl glycol	6
DPM	3
Rheovis 1291	0.6
Di-water	0.45
total	91.35

Luhydran® S 938 T	71.0
BGA	5.5
BDGA	2.1
DMEA (50% in water)	1.0
Di-Water	19.9
In Total	100.0

Bayhydrol® A 2470	71.0
BDGA	2.0
DMEA (50% in water)	0.1
Water	26.2
Rheovis PU 1291 (50% in water)	0.2
Total	100.0

Defoaming performance



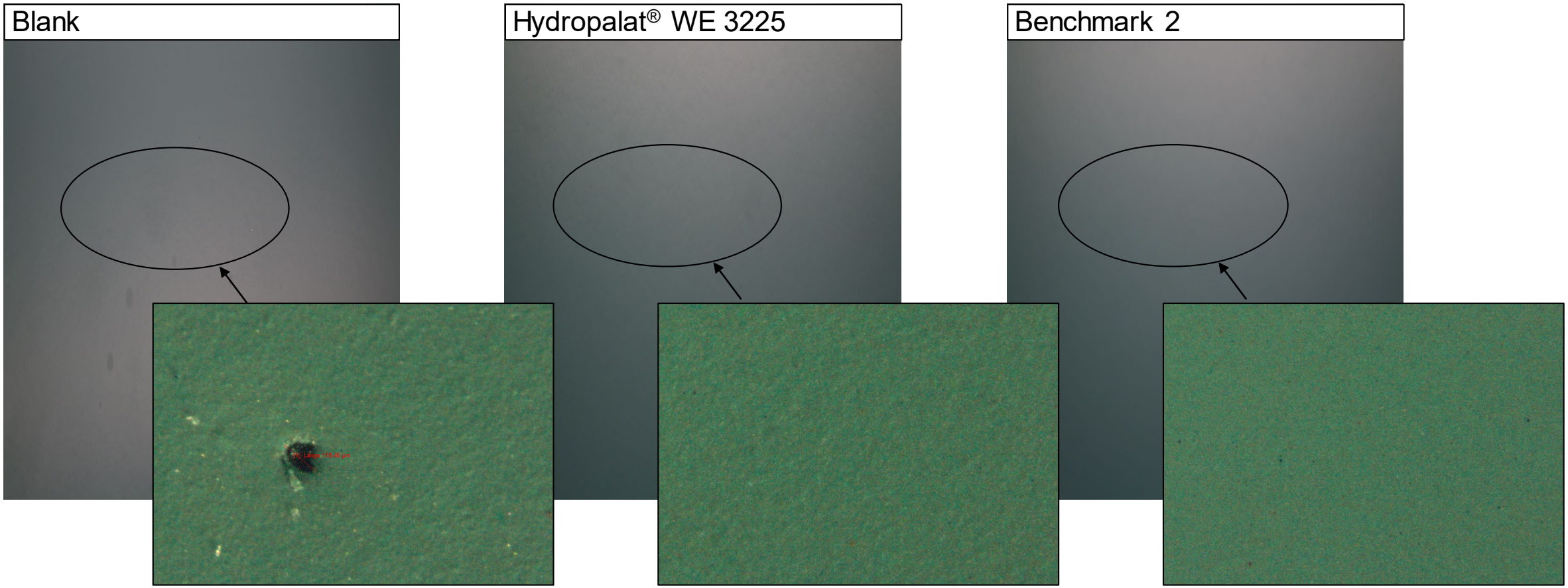
Procedure: Formulation is stirred with a dissolver (e.g. 3 min at 4000 rpm).
Density of the resulting foamy mixture is being measured.
The higher the density the less foam is in the formulation.

Source: BASF Formulation Additives Defoamer Video

Hydropalat® WE 3225 shows excellent defoaming performance compared to benchmark 1 and 2.

BASF
We create chemistry

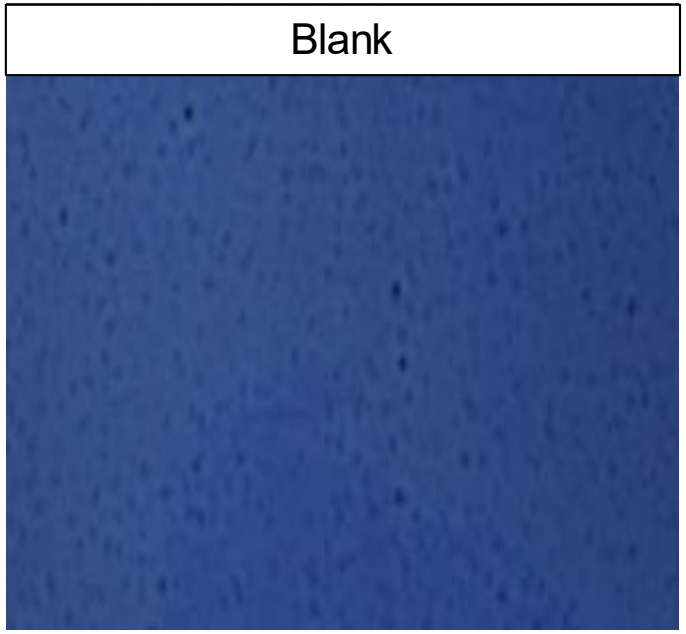
Technical Results – Effect on airless spray application in customer system



Hydropalat® WE 3225 shows excellent wetting and anti-cratering behavior (leveling).

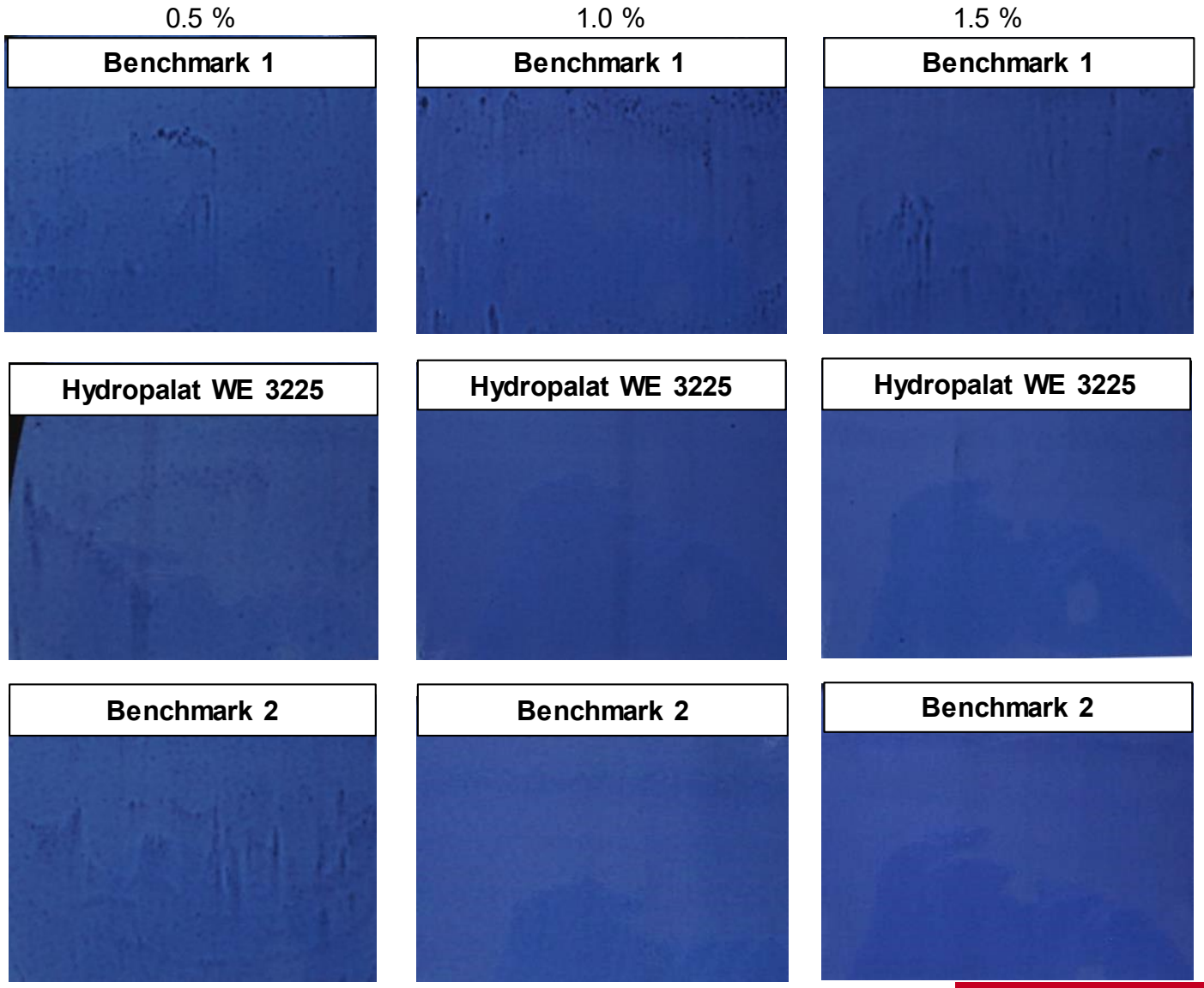
BASF
We create chemistry

Wetting & anti-cratering (based on Joncryl® 1522, wet film)



Hydropalat® WE 3225 shows:

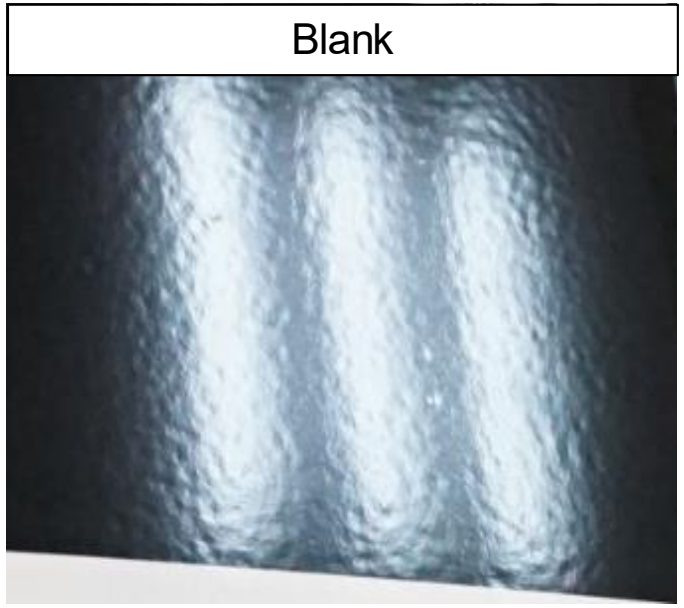
- Benchmark wetting to the competitive product
- Improved anti-cratering compared to internal/ external benchmark
- Improved leveling compared to benchmarks



Craters are generated by adding a strong silicone

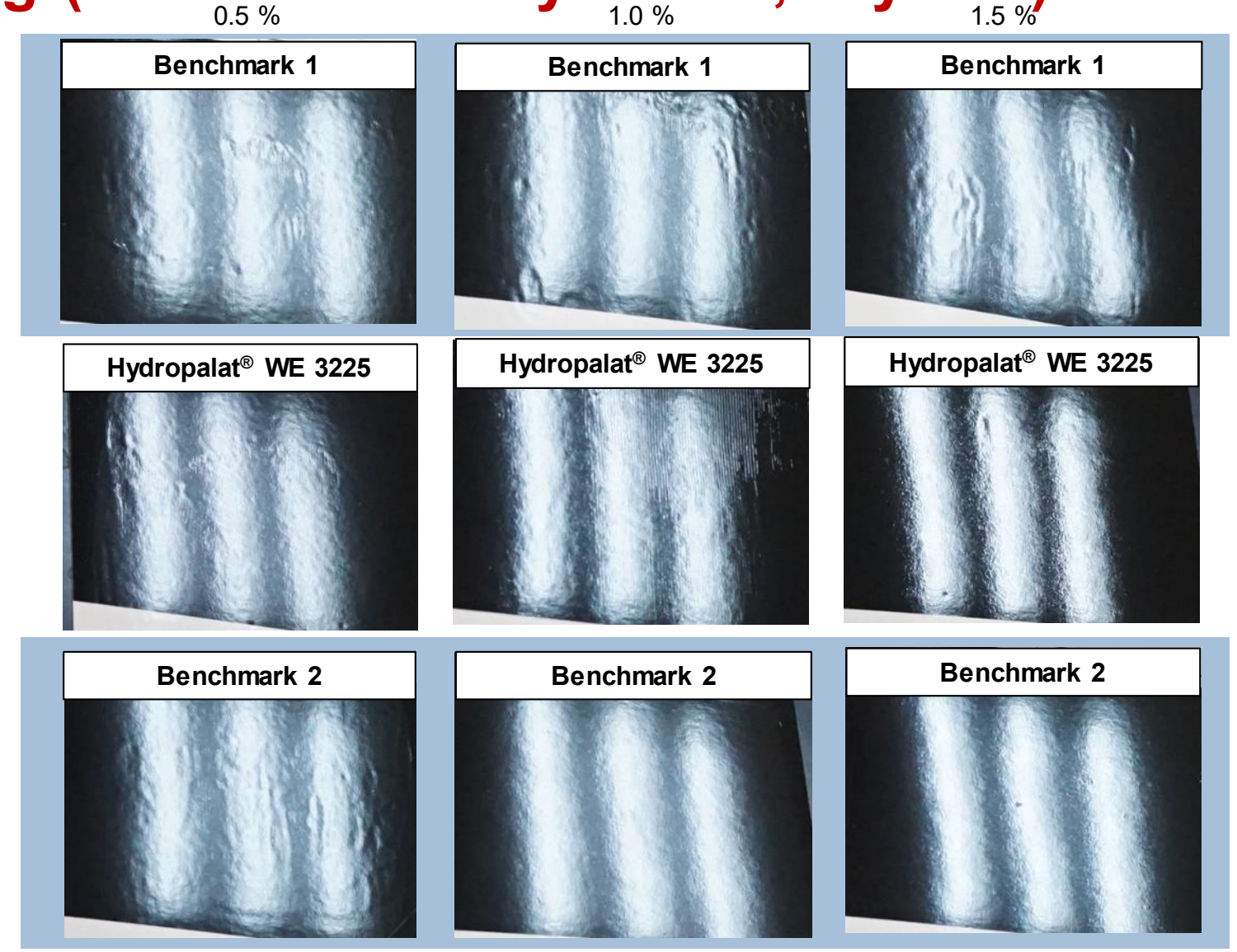
BASF
We create chemistry

Wetting & anti-cratering (based on Joncryl® 1552, dry film)



Hydropalat® WE 3225 shows:

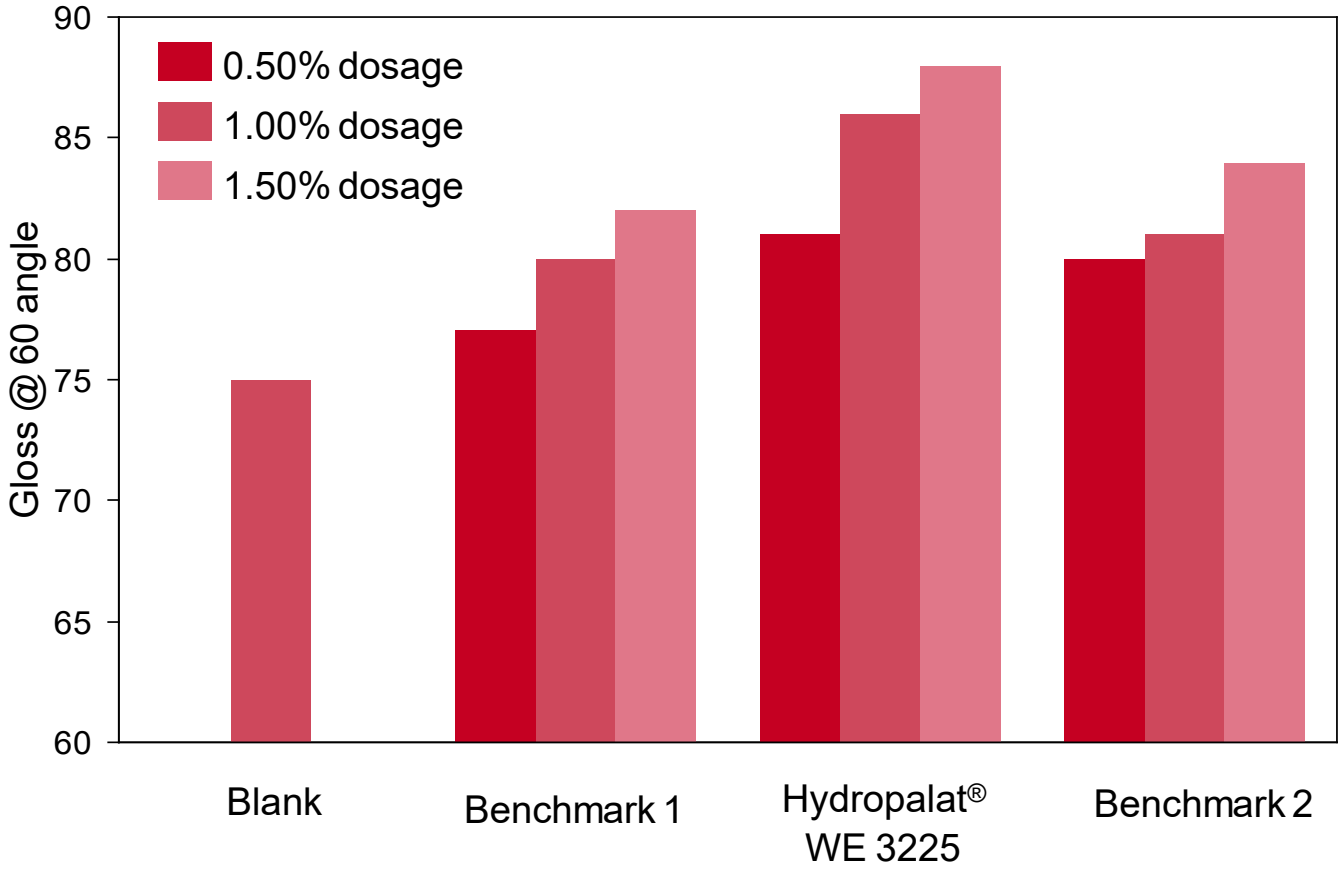
- Excellent substrate wetting to the competitive product
- Improved anti-cratering compared to internal/ external benchmark
- Improved leveling compared to benchmarks
- Higher gloss



Craters are generated by adding a strong silicone

BASF
We create chemistry

Influence on gloss in Joncryl® 1552



Wb Coating (blank)	
Product	**Amount [g]**
Joncryl® 1522	71.0
Dipropylene glycol n-butyl ether (DPnB)	3.9
Texanol	2.2
Propylene glycol n-butyl ether (PnB)	2.2
Rheovis® PU 1291 (50% in water)	1.0
Di-Water	19.2
Total:	**99.5**

Hydropalat® WE 3225 shows higher gloss than internal and external benchmark.

BASF
We create chemistry

Agenda

1. Introduction
2. Performance Highlights
3. Summary

Summary

Hydropalat® WE 3225 is a silicone based wetting agent with pronounced defoaming action. It shows:

- Excellent substrate wetting performance.
- Eliminates surface defects caused by craters or air bubbles
- Best in class defoaming action. Allows higher dosage without negative effects on foaming characteristics
- Increased gloss
- Improved flow & leveling
- Excellent wood grain accentuation
- Low VOC and odor

Contacts

Dr. Sascha Oestreich
Head of Technical Sales Formulation Additives
Phone: + 49 211 7940-9028
Mobile: +49 173 5396101
sascha.oestreich@basf.com

Maurice Epple
Technical Sales Formulation Additives
Phone: +49 621 60-48183
Mobile: +49 173 3478278
maurice.epple@basf.com

Andrea Schamp
Marketing Formulation Additives Europe
Phone: +49 211 7940-2605
Mobile: +49 173 5936561
andrea.schamp@basf.com

internet: http://www.basf.com/additives

email: formulation-additives-europe@basf.com

We create chemistry

Disclaimer

Safety

When handling the mentioned products, please comply with the advice and information given in the safety data sheets and observe protective and workplace hygiene measures adequate for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our products, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. The agreed contractual quality of the product results exclusively from the statements made in the product specification. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.