

## PRODUCTS & MARKET

WorléePur Si 2031

New additions to the sales department

## PARTNERS

Cabot MAJESTIC 710

Synthomer AXILAT™ UP 460S

## SUSTAINABILITY

Sustainability report

Environmental Business Award

Sustainable focus on film

## EVENTS & NEWS

Sponsoring Nik Aaron Willim



# WELCOME TO THE 24TH ISSUE OF OUR WORLÉEJOURNAL

Joachim Freude  
Managing Director



## DEAR CUSTOMERS, PARTNERS AND FRIENDS,

We are delighted to present the first issue of our WorléeJournal in 2024 and hope you all had a pleasant and successful start to the year.

A wide range of product topics awaits you in our current issue. With our WorléePur Si 2031, we present an exciting product for corrosion protection, and our principals

Cabot and Synthomer also report on two interesting new developments.

Our German sales team has been boosted by two new additions, and we are delighted to announce the publication of our fourth sustainability report and to receive the "Umweltpreis der Wirtschaft". We also report on an exciting new sponsor-

ship partnership and invite you to our Sustainability Expo in April.

We hope you enjoy reading this issue!

Yours,

Joachim Freude  
Managing Director

## IMPRINT Publisher

Worlée-Chemie GmbH  
Grusonstrasse 26, 22113 Hamburg  
Tel.: +49 (0)40 733 330  
Fax: +49 (0)40 733 331 170  
EMail: [Service@worlee.de](mailto:Service@worlee.de)  
[www.worlee.de](http://www.worlee.de)

## Managing Directors

Reinhold von Eben-Worlée  
Joachim Freude

Commercial Register Hamburg,  
HRB 9994  
USt-IdNr.: DE 811118426

Responsible: Joachim Freude  
Editorial Department: Alicia Aschmann  
Cooperation: Lars Ossenschmidt,  
Fabian Koos, Katrin Langosch,  
Patrick Nüsseler, Lukas Reichle

This publication is for informational purposes only. There is no liability for the completeness and accuracy of the information contained in this publication.

# WorléePur Si 2031 CORROSION PROTECTION

## HIGHEST SALT SPRAY RESISTANCE WITH SILANE-FUNCTIONAL BINDERS

The products in the WorléePur Si range are silane-functional polyurethane-urea binders, which can be based on various polyols. The products allow the formulation of high-quality coating systems that are characterised by fast drying and cross-linking speeds, maximum resistance and long processing times. The silane groups of the products are activated with an acid catalyst (WorléeAdd 2100) before application, then hydrolyse and polycondense using atmospheric moisture. The base polyols used determine a significant part of the properties, such as lightfastness, flexibility and hydrolytic stability.

WorléePur VP Si 2031 is based on an aliphatic and slightly branched polyester polyol. The product is characterised by a good balance between flexibility and hardness and is suitable, among other things, for the formulation of corrosion-protective primers and one-coat paints, which are characterised by long test times in the salt spray test.



## PRIMER AND TOPCOAT STRUCTURES ACHIEVE OUTSTANDING PROPERTIES

The acid catalyst makes it necessary to pay attention to the formulation. Some coating raw materials can react with it, which means that it is no longer sufficiently available to accelerate or activate the reaction of the silane groups.

In particular, anti-corrosion pigments required for maximum resistance, such as zinc oxide or phosphates, can be mentioned here. It was therefore necessary to find suitable anti-corrosion pigments that cannot react with the acid catalyst. Silica-based pigments, such as Shieldex C 303, do not react with the necessary acid catalyst while providing good corrosion protection properties.

The formulation of the anti-corrosion primer contains standard paint raw materials. Tetraethyl orthosilicate was used as a reactive diluent to increase the non-volatile content.

Base coat	10041-02
WorléePur VP Si 2031	35.80
Worlée Disperse 8100 S	1.00
Luvotix HT-SF	0.20
Kronos 2360	15.00
Regal 400 R	0.10
Bayferrox 420	0.30
Blanc fixe micro	10.00
Talc HB-M 15b	7.50
Shieldex C 303	3.50
Butyl acetate	10.30
n-Propanol	7.00
Methoxypropylacetat	3.00
WorléeAdd 6236	0.30
Tetraethyl orthosilicate	6.00

Table 1: Base coat corrosion protection primer

The catalyst is necessary for the reaction and is added before application.

Catalyst	10041-02
WorléeAdd 2100	1,10

Table 2: Catalyst corrosion protection primer

Including the reactive thinner, the primer has a VOC content of 390 g/l when ready to use. The pot life or processing time is more than six hours.

	10041-02
nfA [%] (including the reactive diluent)	70.0
Density [g/cm³]	1.30
VOC content [g/l] (including the reactive diluent)	390
<b>Viscosity</b>	
Run-down time DIN 4 / 20°C [s]	30
<b>Viscosity curve [s]</b>	
Start	30
After 2 h	45
After 4 h	48
After 6 h	57
After 24 h	gel-like / chunky
<b>Pot life</b>	approx. 6 h

Table 3: General technical data

The lacquer dries quickly and reaches dryness level 6 after a short time. The lacquer film can therefore withstand mechanical loads at an early stage.

	10041-02
Dust dry	20 min
Adhesive-free	1 h 5 min
Dry degree 4	2 h
Dry degree 6	2 h 15 min
<b>Pendulum hardness [s]</b>	
After 2 h	28 30
After 4 h	49 47
After 6 h	55 56
After 24 h	80 81
After 48 h	87 89
After 1 week	99 99
After 2 weeks	102

Table 4: Drying properties and hardness development

The primer achieves good adhesion properties on various common metal substrates.

	10041-02
<b>Dry film thickness after 1 week</b>	
Sendzimir galvanised steel	140 µm
Aluminium	85 µm
CR steel type R	115 µm
<b>Adhesion after 4 weeks</b>	
CR steel type R	Gt. 0
Sendzimir galvanized steel	Gt. 0
Aluminium	Gt. 1

Table 5: Adhesion properties on various metals

To test the salt spray resistance, this was painted over with a topcoat also based on WorléePur VP Si 2031 (RR 1.8936-05).

Beforehand, the time after which the primer could be painted over with the topcoat without any problems was investigated. No abnormalities, such as wrinkling, poor wetting or similar, were found during the corresponding test times. The primer could be painted over after a short time. None of the tested paint structures showed poor intercoat adhesion or adhesion to the substrate.

	10041-02
Surface	CR steel type R
<b>Dry film thickness after 1 week</b>	
Primer	35–45 µm
Topcoat (with primer)	75–80 µm
<b>Adhesion after 24 h</b>	
Painted over on primer after 2 h	Gt. 0
Painted over on primer after 6 h	Gt. 0
Painted over on primer after 24 h	Gt. 0
<b>Adhesion after 1 week</b>	
Painted over on primer after 2 h	Gt. 0
Painted over on primer after 6 h	Gt. 0
Painted over on primer after 24 h	Gt. 0

Table 6: Recoatability and intercoat adhesion

Throughout the entire test period in the salt spray unit, the structure showed very little blistering and virtually no corrosion on the surface. There was also very little infiltration and blistering on the scribe. After the test, good adhesion to the substrate was still evident.

	10041-02
Surface	CR steel type R
Dry film thickness of primer (after 2 h)	115–125 µm
Dry film thickness + top coat (24 h after application of primer)	180–200 µm
Total dry film thickness after 1 week	190–220 µm
Test duration	1512 h
Bubble degree cross	57
Infiltration cross	m 0-1 g 4 *
Bubble degree Area	3 mm
Degree of rust	m 3 g 1–3
Tesa tear-off	Ri 0–1
Adhesion (24 h after removal from the appliance)	Gt. 0

Table 7: Salt spray resistance in the structure after 1512 h

10041-2 gen. Beaml	10041-2 gen. Beaml	10041-2 gen. Beam	10041-2 gen. Beam
190-220µm sprayed 23.02.2023	190-220µm sprayed 16.03.2023	190-220µm sprayed 06.03.2023	190-220µm sprayed 28.03.2023
Start Salt spray test	504 h Salt spray test	1,008 h Salt spray test	1,512 h Salt spray test + 24 h RT



## SILK GLOSS ONE-COAT PAINTS WITH EXCELLENT PROPERTIES CAN ALSO BE FORMULATED

Build-ups of primers and topcoats achieve very good results. However, this requires two different paint systems, which makes handling more complicated. For this reason, more and more use is being made of one-coat paints, i.e. paint systems that can be used directly on different substrates without prior priming. WorléePur VP Si 2031 is also suitable for the formulation of such paint systems.

Corrosion protection pigments based on silicic acids should also be used in this coating system in order to reduce side reactions with the acid catalyst. In this case too, tetraethyl orthosilicate was used to increase the non-volatile content.

	9964 - 02
WorléePur VP Si 2031 75% butyl acetate / n-Propanol	39.70
WorléeDisperse VP 8100 S	1.00
Luvotix HT-SF	0.30
Kronos 2360	15.00
Regal 400 R	0.10
Bayferrox 420	0.30
Blanc fixe micro	13.50
Shieldex C 303	3.50
Butyl acetate	10.30
n-Propanol	7.00
Methoxypropyl acetate	3.00
WorléeAdd 6236	0.30
Tetraethyl orthosilicate	6.00
	100.00

Table 8: Base coat silk gloss one-coat paint

The catalyst is also added to the one-coat paint before application in order to activate the base coat.

	9964 - 02
WorléeAdd 2100	1.20

Table 9: Catalyst for semi-gloss one-coat paint

The ready-to-use paint system has a VOC content of less than 400 g/l. Compared to the primer, the one-coat paint has a significantly longer pot life or processing time. This is more than 24 hours.

	9964 - 02
Viscosity DIN 4 / 20°C [s]	
Quantity of master varnish	100.00 g
Catalyst quantity	1.20 g
Run-out time is	63 s
Run-out time should be	40 s
Addition of solvent	7.0 g
Non-volatile portion [%]	70 incl. reactive thinner
Density; 20°C [g/cm³]	1.25
VOC content [g/l]	< 400
<b>Viscosity curve DIN 4 / 20°C [s]</b>	
Start	36
After 2 h	36
After 4 h	36
After 6 h	36
After 24 h	51
Pot life	> 24 h

Table 10: General technical data

The drying speed and hardness development are comparable to that of the primer. A degree of dryness of 6 is achieved after just over two hours.

	9964 - 02
Dust-dry	30 min
Tack-free	2 h
Dry degree 4	2 h
Dry degree 6	2 h 20 min
Pendulum hardness [s]	
After 2 h	31 31
After 4 h	48 48
After 6 h	60 60
After 24 h	97 98
After 48 h	98 98
After 1 week	107

Table 11: Drying properties and hardness development

The formulation achieves a silky gloss. A noticeably higher gloss level cannot be achieved with WorléePur VP Si 2031 without good corrosion protection properties.

	9964 - 02
Gloss level 60°/ 85°	
After 6 h	61 / 93
After 24 h	56 / 92
After 48 h	54 / 91
After 72 h	53 / 91
After 1 Week	52 / 91

Table 12: Glossing

The one-coat paint is well suited for coating cold-rolled and Sendzimir galvanised steel. Adhesion to aluminium may not be sufficient. The structure consisting of primer and topcoat is more suitable for this.

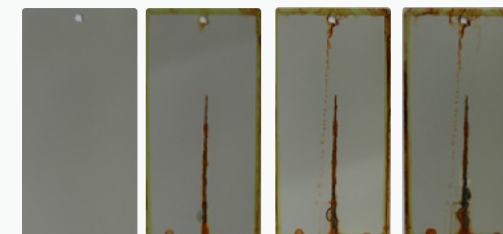
	9964 - 02
Surface	CRS type R
Adhesion after 4 weeks	
CRS type R	Gt. 0
Sendzimir galvanised steel	Gt. 0
Aluminium	Gt. 3

Table 13: Adhesion properties on various metals

The single-layer coating also achieves a very long service life in the salt spray test. After the test time of more than 1100 h, there is only slight infiltration at the scribe, very little blistering and no corrosion.

	9964 - 02
Dry film thickness after 1 week	ca. 140 µm
Surface	CRS type R
Test duration	1,176 h
Blistering degree cross	m 0-1 g 3
Infiltration cross	3 mm
Blistering degree Area	m 1 g 1
Degree of rust	Ri 0

9964-02 CRS type R	9964-02 CRS type R	9964-02 CRS type R	9964-02 CRS type R
approx. 140 µm	approx. 140 µm	approx. 140 µm	approx. 140 µm
Start salt spray test	504 h salt spray test	840 h salt spray test	1,176 h salt spray test



# WORLÉE-CHEMIE GETS SUPPORT FOR THE SALES DEPARTMENT

Back in August, we welcomed two new colleagues to the Worlée-Chemie sales team. Both will actively support our sales offices in the future with their expertise and passion for sales.



**Patrick Nüsseler – Worlée-Chemie**  
(sales office South & Austria)

**Patrick Nüsseler** will support the South & Austria sales office together with Bernd Döbelin and Andrea Reinfels. He completed two apprenticeships as a painter and varnisher and as a vehicle painter, followed by further training as a state-certified paint technician. This has given him extensive experience in the industry. As a painter, he has worked in small workshops as well as in the industry and gained in-depth product knowledge through his paint technician training.



**Lukas Reichle – Worlée-Chemie**  
(sales office Hamburg)

**Lukas Reichle** supports the Hamburg sales office together with Matthias Körber and Birte Grätzer. The trained paint laboratory technician also has a lot of practical experience. He also completed his training as a state-certified paint technician and subsequently developed a wide variety of paints and varnishes for interior and exterior use as a paint technician.

**‘We are very pleased about the new additions to the team and wish them both a good start at Worlée.’**

# MAJESTIC™ 710 SPECIALTY CARBON BLACK

## HIGHLY DISPERSIBLE CARBON BLACK FOR WATER-BASED SYSTEMS

The global market for water-based coatings is growing steadily, but poses major challenges for paint manufacturers focusing on these technologies.

Pigments typically require thorough dispersion in order to achieve satisfactory colouristic properties.

The use of carbon black pigments in particular poses a challenge due to the time-consuming grinding process and the high demand for dispersants, which leads to increased production effort and rising costs.

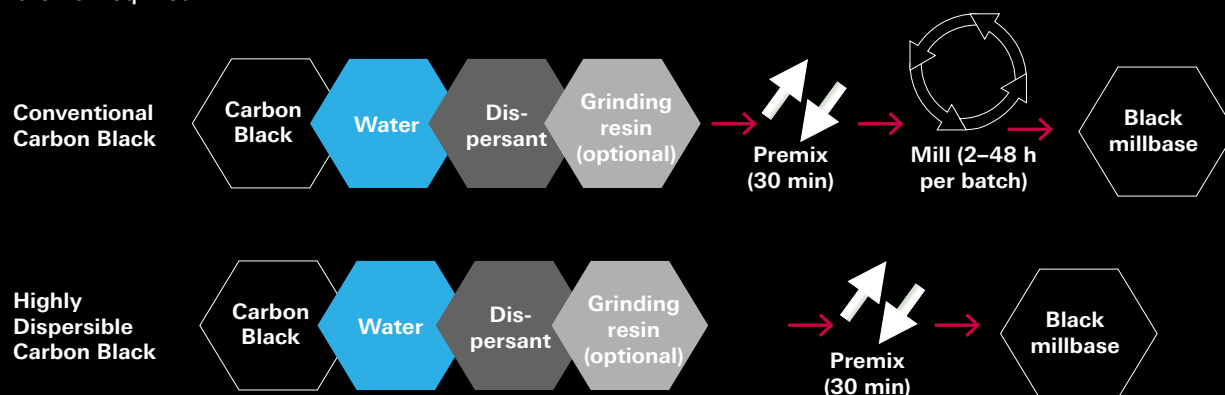
The newly developed speciality carbon black MAJESTIC™ 710 from Cabot has been specially developed for waterborne coating systems to overcome these challenges. MAJESTIC™ 710 features exceptional dispersibility and premium colour performance and can be used in a variety of industrial applications, including decorative and industrial coatings, adhesives, fibre dyeing and concrete/cement colouring.

This easy-to-disperse carbon black pigment is suitable for use in mastone and in tinting applications and enables an equivalent or improved jetness compared to black pigments with a similar morphology.

The special surface modification of MAJESTIC™710 enables quick and easy incorporation into water-based systems, it is effectively stabilised in the system and shows high compatibility with the various polymer resins.

## MAJESTIC™ 710 SPECIALTY CARBON BLACK ENABLES A MORE SUSTAINABLE COLOUR SOLUTION

When incorporating the easy-to-disperse carbon black MAJESTIC™ 710, the time-consuming milling step is not required. Similarly, large quantities of dispersing agent are not required for incorporation and stabilisation; depending on the system used, the use of dispersing agents large quantities of dispersing agent are not required.

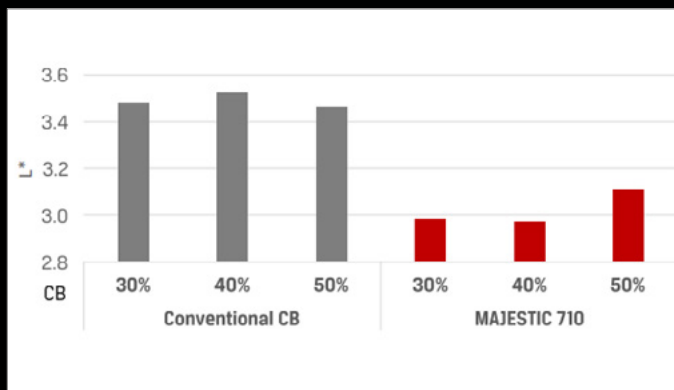


By eliminating pre-dispersion and dispersing the carbon black directly at the point of use, the number of logistical steps is significantly reduced. This in turn eliminates the need to transport water and reduces the use of scarce resources such as energy and water, contributing to more efficient and resource-saving production. These process optimisations can also lead to considerable cost and time savings.

# MAJESTIC™ 710 DEVELOPS A BETTER COLOUR PERFORMANCE COMPARED TO CONVENTIONAL CARBON BLACK.

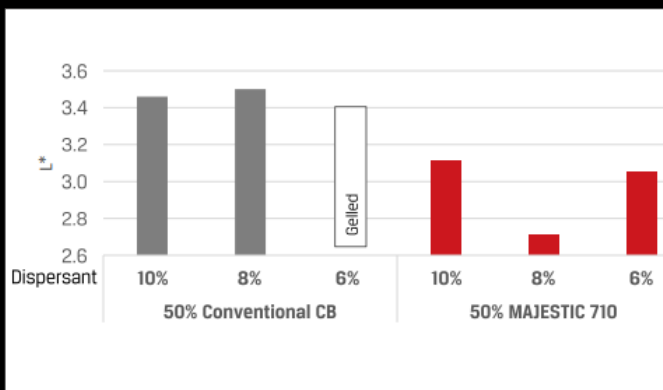
To evaluate MAJESTIC™ 710, a comparison was made with conventional carbon blacks in various binder systems. The dispersibility and colour performance were evaluated. In the production of the millbase, the conventional carbon blacks were intensively dispersed using a bead mill, while only a high-speed dissolver was used for the MAJESTIC™ 710.

## MAJESTIC™ 710 IS EASY TO DISPERSE AND OFFERS A HIGHER JETNESS



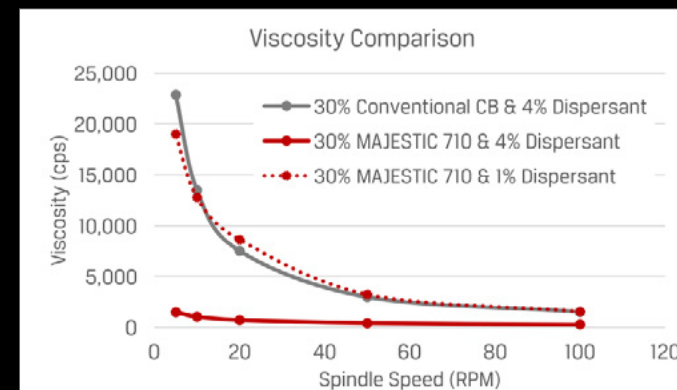
10% dispersant was used in all formulations.

## MAJESTIC™ 710 ENABLES A REDUCTION OF THE DISPERSING AGENT



Dispersant loading was varied between 6% and 10% in the formulation. With the application amount of only 6% the formulation gelled with the conventional carbon black. MAJESTIC™ 710 disperses well with all dispersant concentrations, whereby the best colour performance was achieved with 8% dispersant.

## IMPROVED VISCOSITY STABILITY OF CARBON BLACK

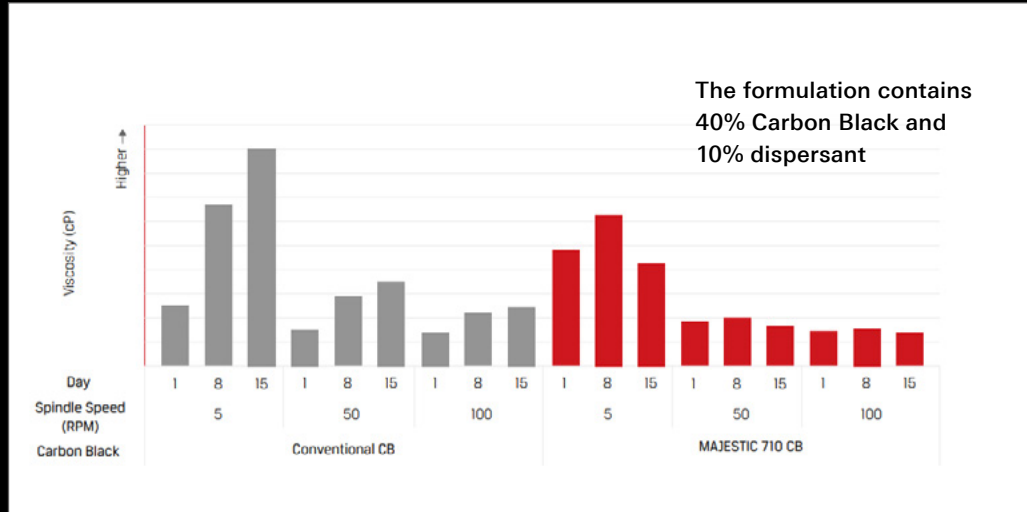


- ▶ The results of the viscosity measurements show that MAJESTIC™ 710 requires only 25% of the dispersant to achieve the same viscosity profile as conventional carbon black.
- ▶ However, with the same amount of dispersant, significantly lower viscosity values would have been achieved. Overall, the impact on the viscosity of the system was low, even at high carbon black concentrations.



## IMPROVED VISCOSITY STABILITY OF CARBON BLACK MILLBASE

The viscosity of a millbase determines its flowability and therefore impacts its ease of use in the final formulation. In addition, the change in viscosity over time is an indicator of stability.








The comparative results of the viscosities show that the use of MAJESTIC™ 710 for the millbase leads to a stable viscosity over time (1–15 days), while a continuous increase in viscosity is observed when using conventional carbon black.

In summary, it can be said that the new MAJESTIC™ 710 Carbon Black is ideal for water-based coatings. The unique surface modification of MAJESTIC™ 710 results in a good balance between very easy dispersibility, excellent colour properties and very good compatibility with polymer resins. In addition, no high dispersant additives are required for stabilisation. The elimination of pre-dispersion significantly reduces the number of logistical steps, resulting in considerable cost and time savings for coating manufacturers.

## PRODUCT BENEFITS

Highly dispersible Carbon Black MAJESTIC™ 710 provides several processing and cost benefits:

-  Can eliminate milling step
  -  Enables dispersant loading reduction of 75% or more
  -  Enables viscosity reduction of millbase of 90% or more
  -  Provides color and tinting strength performance equal to or better than conventional carbon black of equivalent morphology
  -  SoftBead™ technology improves ease of handling
- Benefits are formulation dependent

The MAJESTIC™ 710 beaded Carbon Black is easy to dose and to handle. The Softbead™ technology from Cabot significantly reduces dust formation during transport and processing with the MAJESTIC™ 710 compared to powdered carbon black.

**Take a look at the MAJESTIC™ 710 product from our sales partner Cabot Corporation and feel free to contact us for more information!**

Contact:

Fabian Koos | +49 40 73333-2566 | FKoos@worlee.de

# NEWS FROM THE AXILAT™ PRODUCT RANGE FROM SYNTHOMER

**High-performance redispersible powders have the ability to impart certain beneficial properties to brittle, cementitious mortar, such as improved adhesion and flexibility, resulting in more durable and resilient tile installations.**

With this development comes increased demands on modern tile adhesives. Not only do they need to provide excellent adhesion and a long open time, but they also need to be flexible enough to absorb shock, vibration and tension between the tile and the substrate. Water and heat resistance are also becoming more important.

For the user, however, good processability, long open time and stability play an increasingly important role. Redispersible polymer powders are used to improve the performance of modern tile adhesives. Synthomer offers a wide range of high-performance, redispersible powders (Axilat RDP) for the building materials industry, which as an important component in tile adhesives help to

improve key properties – from adhesion and flexibility to resistance to environmental influences.

Today, we would like to introduce you to the latest product in the RDP range from Synthomer.

Whether it's the refined look of wood, the timeless character of natural stone or the noble appearance of marble – tiles are truly multifaceted and set no limits to the design possibilities. They offer a wide range of designs, colours and textures that make it possible to suit the most diverse aesthetic tastes.

Their versatility and practicality make them in high demand in the construction industry and one of the world's most popular floor coverings.

The areas of application are diverse: indoor or outdoor, floor, ceiling or wall, mosaic or XXL format, on a wide variety of substrates. Advances in tile production have led to innovative materials that are lighter, thinner and yet robust. This has also made the installation of large tiles much easier. For some time now, large-format ceramic tiles have been setting trends in living areas around the world.



AXILAT™  
UP 460S  
high-performance  
redispersible powder  
for use with inflexible  
ceramic tile adhesive

## AXILAT™ UP 460S

AXILAT™ UP 460S is a versatile next-generation redispersible powder specifically developed for high-value applications in the modern construction industry, offering a range of balanced properties including best alkali resistance, strong adhesion and excellent flexibility.

Based on VeoVa technology, this high-performance dispersible polymer powder is produced by spray-drying the aqueous polymer dispersion and is particularly suitable as a binder for flexible tile adhesives. AXILAT™ UP 460S is an extremely versatile resin with high redispersibility in water. It contributes to improved workability, stability and extended open time of the fresh mortar.

Formulation	
Raw Material	Qty (%)
Milke Premium CEM I 52,5 R	35.0
Sand	59.1
Calcium Formiate	0.5
Cellulose Ether	0.4
<b>RDP</b>	<b>5.0</b>
Water	27 (+/- 1)

### Applications

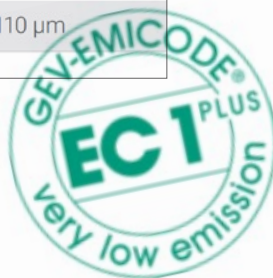
- Ceramic Tile Adhesives:
  - C2 TE S1
  - C2 E S2

## C2TES1 – MORTAR

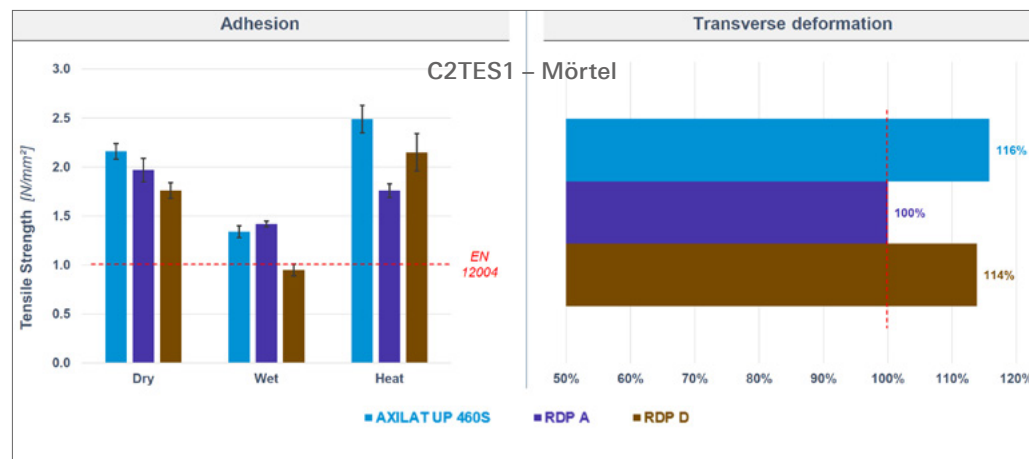
In cementitious tile adhesives, AXILAT™ UP 460S offers improved adhesion even on difficult substrates. The adhesive strength is improved both after heat storage and after immersion in water.

Due to its high adhesion properties, AXILAT™ UP 460S can be used to produce mortars that meet C1 and C2 requirements.

Property	AXILAT™ UP 460S
Core-Shell	
Chemistry	VA / VV / Acrylic
Tg	-33 °C / +29 °C
Ash Content	10 %
Particle Size	110 µm

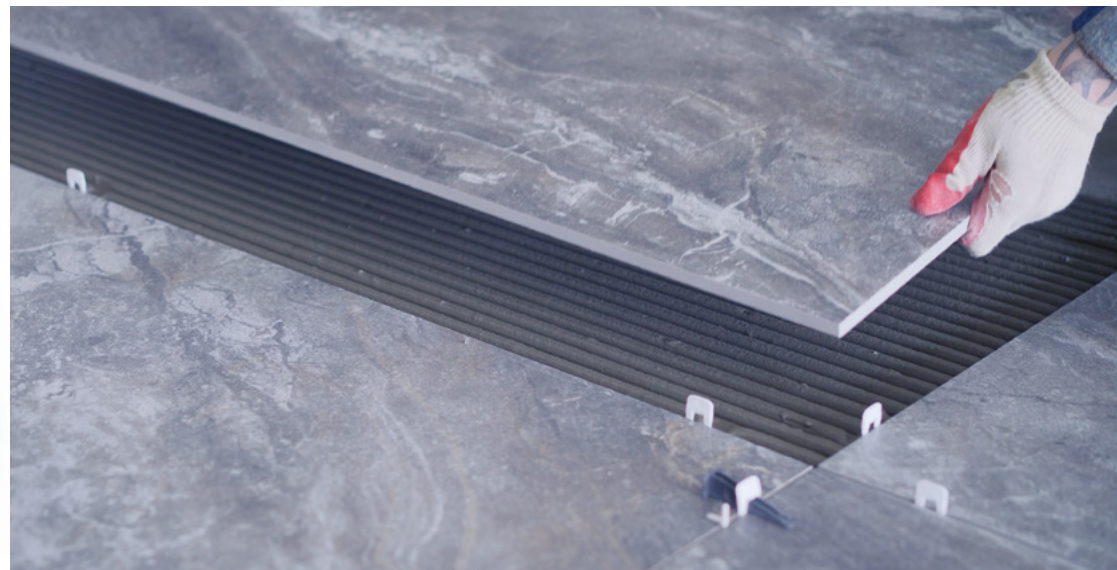


## AXILAT™ UP 460S SHOWS EXCELLENT ADHESION PROPERTIES IN C2TES1 MORTARS



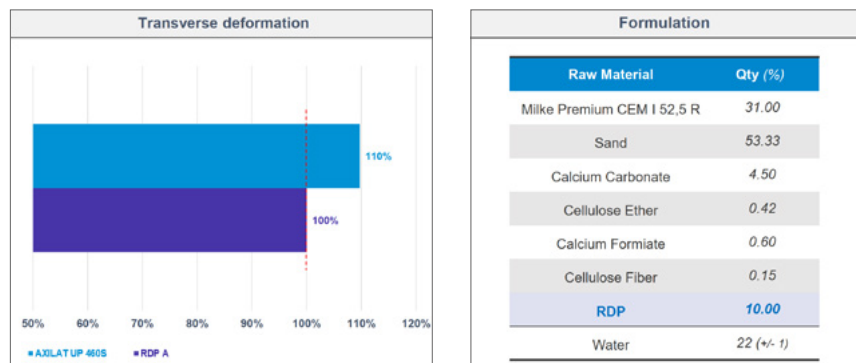
In addition to excellent adhesion, AXILAT™ UP 460 offers a significant increase in the flexibility of tile adhesives. The latter is especially important for particularly large-format tiles, which are very popular these days, in order to more easily compensate, for example, the resulting stresses between the tile and the substrate.

The flexible nature of the polymer matrix helps to absorb impact loads and stresses including those caused by temperature differences, which can result from movement or deformation in the substrate. This helps to minimise cracking in the tiles.



## C2ES2 – DRY MORTAR

Highly deformable tile adhesive with S2 classification. A particular strength is the absorption of horizontal forces.



AXILAT™ UP 460S shows excellent performance in C2ES2 mortars and outperforms the standard RDP in terms of transverse deformation. AXILAT™ UP 460S also offers improved open times in C2ES2 mortars, which facilitates processing.

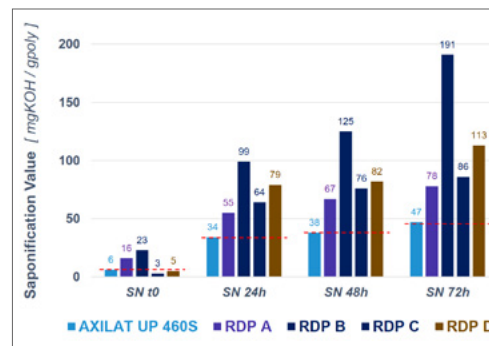
AXILAT™ UP 460S can be used at temperatures around 5°C and in a wide range of applications and is ideal for modifying tile adhesives with different performance requirements (C1, C2, S1 and S2).

## FEATURES

- ▶ Very high alkali resistance, improved water resistance
- ▶ Excellent adhesion (dry, wet and heat adhesion)
- ▶ Excellent mechanical properties (flexibility, abrasion resistance, flexural strength)
- ▶ Improved processability and extended open time
- ▶ Free of organic solvents, plasticisers and film-forming agents
- ▶ Allows EC1+ certified formulation
- ▶ Suitable for use at low temperatures

Its market-leading alkali resistance provides improved water and saponification resistance, making it ideal for use in areas with high humidity or direct contact with water.

## ALKALI RESISTANCE



Benchmark	
Product	Type
<b>AXILAT™ UP 460S</b>	VA / VV / Acr
<b>Commercial RDP A</b>	VA / E / Acr
<b>Commercial RDP B</b>	VA / VV / Acr
<b>Commercial RDP C</b>	VA / VV
<b>Commercial RDP D</b>	VA / VV

*All RDPs used for flexible CTA mortars*

AXILAT UP 460S offers significantly higher alkali resistance than currently available RDPs.

## ADVANTAGES DUE TO HIGH ALKALI RESISTANCE

- ▶ Stronger polymer resistance to moisture
- ▶ Lower VOC emissions into the environment after application

### HIGH PERFORMANCE WITH LOW EMISSIONS

Last but not least, AXILAT™UP 460S, like AXILAT™ HP 8510, is free of organic solvents, plasticisers and film formers. It enables the development of CTA formulations that fulfil the best possible Emicode EC1+ classification.

Take a look at the Synthomer products and feel free to contact us for further information.

Contact:  
Fabian Koos | +49 40 73333-2566 | FKoos@worlee.de



# THE 2023 SUSTAINABILITY REPORT IS PUBLISHED

The time has come – the fourth sustainability report from Worlée-Chemie titled “Sustainability: Ideas, Solutions, for a better life.” is published.

It mainly covers the years 2021 to 2023. With our reports, we aim to provide a holistic picture of our corporate performance based on economic, ecological and social aspects. The report was created in accordance with the Global Reporting Initiative (GRI) standards ‘Core’ option. We provide open and transparent insights into our work to date and our future goals. We would like to enter into a dialogue with you about them and make a contribution to sustainable development.

The sustainability report can be found on our website:

<https://www.worlee.de/en/chemical-raw-materials/sustainability/sustainability-report/>

Sustainability is  
in our DNA. That is why  
we develop products for  
the future.

# ENVIRONMENTAL BUSINESS AWARD FOR THE CAMELINA OIL PROJECT



There has been another cause for celebration at Worlée-Chemie thanks to the recognition of one of its flagship projects.

On 13 November 2023, Johanna von Eben-Worlée, Matthias Körber and Dr Toine Biemans received the Environmental Business Award for the camelina oil project from the Studien- und Fördergesellschaft der Schleswig-Holsteinischen Wirtschaft e.V.

The jury praised the project with the following words: 'By establishing a value chain based on native, renewable raw materials, Worlée-Chemie GmbH is making an exemplary and sustainable contribution to promoting biodiversity in the region, supporting local agriculture and replacing imported oils with native, plant-based ones.'

The Studien- und Fördergesellschaft der Schleswig-Holsteinischen Wirtschaft e.V. has been honouring companies with the Environmental Business Award (Umweltpreis der Wirtschaft) since 1984.

The prize is awarded to companies from Schleswig-Holstein that have made, or are making, significant contributions to nature conservation and environmental protection in cooperation with the business community. The award recognises activities that go beyond what is required by law and meet the needs of the environment and the economy in an exemplary manner through new processes, new products or in other ways.



Pictures: ©Thomas Eisenkrätze

## THE CAMELINA OIL PROJECT

The transformation to a more sustainable world will also challenge the coatings and raw materials industry in the coming years.

We would like to play our part by developing more sustainable binders and additives for a wide range of formulations. The use of camelina oil instead of linseed oil in alkyd resins can play a significant role here. Camelina oil is an alternative raw material that produces almost identical results in application.

Since 2017, we have been working with local farmers to grow camelina in mixed crop cultivation with peas. Through regional cultivation, we have shorter transport routes and consume less energy for transport. As a result, less alternative oils need to be imported for the production of binders.

Our goal is to increasingly replace linseed oil with camelina oil and to increase the yield to 200–250 tonnes per year. Equally important to us is the expansion of acreage for mixed crop cultivation through regional farmers in northern Germany.

Learn more about our camelina oil project and suitable products [here](#).

# SUSTAINABLE FOCUS:

## TWO SHORT FILMS ABOUT OUR ENGAGEMENT

### WE HAVE WELCOMED A FILM CREW TO LAUENBURG ON TWO OCCASIONS IN THE LAST FEW MONTHS.

We had a short film made about our camelina project as part of the award ceremony for the Environmental Business Award.

The film aims to present our project as a whole by showing the entire camelina value chain. The transformation to a more sustainable world will also challenge the coatings and raw materials industry in the coming years. We want to play our part by developing more sustainable binders and additives for a wide range of formulations.

The second filming team was then on site to talk about climate protection in SMEs. Reinhold von Eben-Worlée was interviewed on the subject as part of a short report by the Tangstedt Climate Council.

It is an interesting short film that not only shows what we have done as a company so far, but also aims to inspire other SMEs in Tangstedt and beyond to take action in climate protection.



The film can be found here:  
[Worlee-Chemie: "From the field into the paint can" - Sustainable raw materials through camelina oil - YouTube](#)



Click here for the report in German:  
[KLIMASCHUTZ IM MITTELSTAND | Ein Interview mit Reinhold von Eben-Worlée - YouTube](#)

# WORLÉE PROVIDES SUPPORT ON THE WAY TO THE 2024 OLYMPICS

Together with Nik Aaron Willim, we are setting sail for the 2024 Olympics. As the sailor's new sponsor, we are supporting him for the upcoming season and on his way to the 2024 Olympic Games.

“Only those who know where they want to sail can set sail correctly.” Jürgen Meier

Nik Aaron Willim is 27 years old, comes from Kiel and sails for the Norddeutscher Regatta Verein in the men's single class. He has been competing in the sport for many years and has already achieved a number of successes. He is a multiple German champion, won medals at the Junior World Championships and only just missed out on the podium at the 2023 European Championships, finishing in fourth place. At the same time, he qualified as the best German for the Pre-Olympics this season and has now been nominated as the City of Hamburg's Sportsman of the Year.

At the beginning of February, Nik went to the World Championships in Australia, where he finished in 14th place in very difficult conditions. Although his ambitions were higher, he returned home not only with his best World Championship result, but also with valuable points for Olympic qualification.

In 2024, his goal remains beating his friend and training partner and taking part in the Olympic Games with the aim of winning gold. Together with other partners, we will accompany Nik on this journey.

“In keeping with our products, the Worlée logo will be displayed on the hull of Nik Aaron Willim's ILCA 7 from now on. We are very pleased about the new partnership and to be able to accompany such an ambitious and committed athlete on his journey.”

We will keep you updated.

## WORLÉE PRODUCTS FOR SHIP AND BOAT BUILDING

At Worlée-Chemie, we have been producing functional binding and coating agents for the use in shipbuilding and boatbuilding for many years.

Our products are used in particular for painting the hulls of ships and boats. The possibilities here vary – our products can be used as solvents or binders, matting agents, effect pigments, colourants or biocides.

With our WorléeProtect VP 1619 and VP 1626, we offer two high-quality inorganic-organic hybrid materials that can be used for new coatings or on existing coating systems.

The long-term protection of the materials plays another important role here. The hull of a ship in particular is exposed to constant weathering conditions and the growth of algae, mussels and barnacles. Our WorléeProtect range promises long-lasting protection for boat paintwork.

