

# EvoKure INNOVATION FOR FUTURE

MADE IN GERMANY

## YOUR CHALLENGE is our goal

For us at Lankwitzer, the high demands of our global customers are the standard we have pursued successfully for many decades. This applies to the environmental compatibility of our products and equally to the first-class quality of the coating on your components.

In terms of cost-efficiency and process reliability, it is only possible to design the coating process successfully with solutions that are optimally matched to the task

Our highly qualified, intensely focused and enthusiastic development team therefore works constantly on the continuing evolution of existing systems as well as on the development of pioneering new paint systems. As a result of this commitment, we have successfully developed a completely ground-breaking and future-oriented paint system:

### EvoKure

**Experience the extraordinary** properties of this system for yourself and benefit from tomorrow's technology today.



# SPEED AND CONTROL

#### **Customised drying**

The technological innovation of the EvoKure paint system has enabled the development team at Lankwitzer Lackfabrik GmbH to combine speed, flexibility and ecology in the coating process for the very first time.

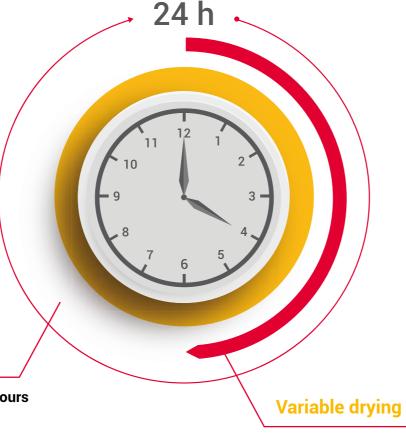
EvoKure, the completely new coating technology, is characterised by extremely fast drying behaviour - even at room temperature - and full processing flexibility. The system is processed isocyanate-free, enabling it to meet tomorrow's environmental requirements today.

Full curing of EvoKure is rapid due to the spontaneous reaction mechanism. Defined addition of time-control additives controls the cross-linking process and can be adjusted individually according to your application conditions.

EvoKure offers ground-breaking ease of processing thanks to a drying curve previously unattainable with paint systems. After coating, the paint remains "open" for a long time to absorb overspray in the wet film. This gives you a flawless surface that is free of overspray "dust" because it is completely absorbed. When the drying mechanism starts, the coating is fully cured within a few minutes and ready for all mechanical and chemical stresses.

### Variable pot life

adjustable up to 24 hours



EvoKure is also suitable for wet-on-wet application, with extremely fast recoating times of the primer.

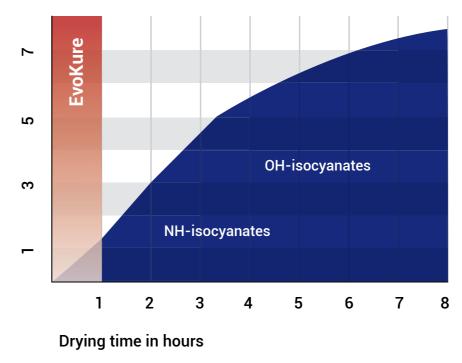
after 20-30 min: DS 6-7 after 30 min: block resistance

#### Pot life

Unlike conventional paint systems, with EvoKure the pot life is not linked to the individual settings of the drying time. The previously known equation "fast drying = short pot life" does not apply to EvoKure. Drying is activated with the addition of an anti-blocking agent. As a result, the pot life is controlled separately from the drying and the pot life can be set up to 24 hours.

### We create your customised drying design

#### Drying as a function of the pot life









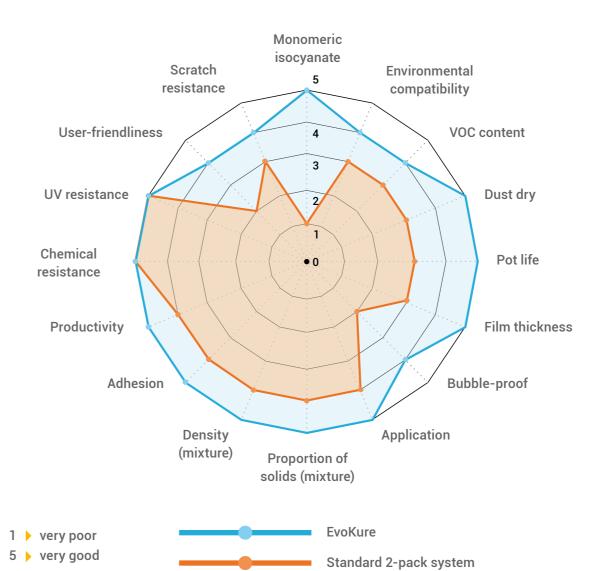
## **PROPERTIES AND** ADVANTAGES

EvoKure is environmentally friendly due to its very high solids content and isocyanate-free formulation. Both the VOC emissions and material consumption are reduced to a minimum. Due to the very fast drying, for which no oven is needed, in terms of space requirements, painting times and energy costs you can achieve enormous potential savings in the coating process compared to current standard paint systems.

EvoKure is extremely user-friendly. All gloss levels and colours are possible. With appropriate formulations, we can guarantee high sagging resistance in overlapping areas. And even with high-gloss paint finishes, the emission-free curing mechanism guarantees bubble-free surfaces with high dry film thicknesses.

EvoKure is a high-performance coating. Even with all the advantages mentioned, there is no compromise on the performance profile. In many parameters, the chemical, atmospheric and physical protective properties are comparable to or exceed the values of customary 2-pack primers and top coats.

#### Performance comparison between standard 2-pack PUR and EvoKure



### **ADVANTAGES**

- > Very fast, individually adjustable drying times and extremely long pot life
  - Reduction in process times and thus increased productivity
  - Reduced colour loss
  - Reduction in cleaning agents and associated decrease in VOC emission
  - Increased productivity as fewer flushing intervals are necessary
  - Reduction of the waste balance
- Curing at low temperatures makes it possible to reduce the size of the paint shop when redesigning because it eliminates the need for an oven
- Process reliability/bubble-free painting
- Early implementation of safety and environmental standards
- Employee safety during processing/isocyanate-free
- Environmental protection due to lower VOC emission
- Reduction within the solvent balance

#### COST SAVING due to

- Reduction in process times and thus increased productivity
- Reduction of the cleaning agents
- Reduced waste disposal costs
- Reduction of the energy input
- Cost savings when redesigning and maintaining a paint shop

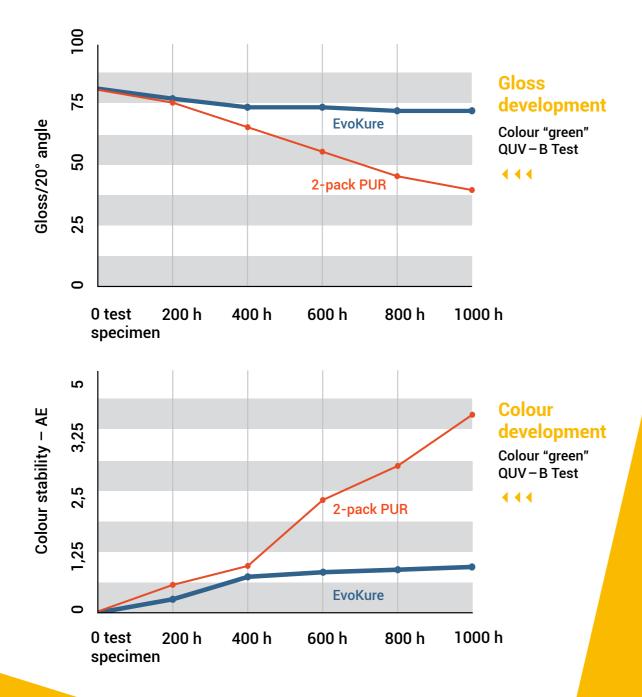
# RESISTANCE

Our customers' products are exposed to the most extreme loads, so our coatings must provide lasting protection with high processing flexibility and effectiveness. We have achieved this superior property profile through innovative EvoKure technology.

Our pioneering EvoKure product range is available both as a twolayer structure and as a single-layer system. The single-layer system combines the high-quality protective properties of a primer with the long-lasting decorative function of the top coat in one material. By using EvoKure, our customers make significant cost savings in their coating process in terms of time, energy and material.

In addition to its outstanding properties in respect of drying, pot life and environmental aspects, the system also impresses with its excellent chemical, mechanical and atmospheric resistance.

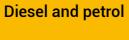
Both as a result of lengthy tests within our laboratory and also external tests at an independent testing institute, we guarantee you a system that fully meets the requirements of your products.

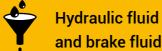


#### Chemical resistance

EvoKure displays **very good** resistance to the following chemicals:







and brake fluid



Antifreeze

#### Performance profile

- Solids ≥ 80 %
- Density: 1.2 1.3 g/l
- Viscosity: 30 40 sec/DIN 4 mm
- > Variably adjustable drying time without forced drying
  - Pot life variably adjustable, up to 24 h
    - ► Isocyanate-free
    - Very good levelling properties
      - Good non-sag properties
      - High gloss possible
- 1,440 h salt spray resistance EN ISO 9227 NSS
- > 750 h condensation/constant climate EN ISO 6270-2
- 1,500 h artificial global weathering EN ISO 16474-2







#### Environment

## **ENVIRONMENT**

#### **Development starts afresh every day**

We made it our business to meet the huge challenges of environmental compatibility and health protection well in advance of the legal provisions regarding the reduction of solvents and the use of isocyanate-free paint systems in paint processing companies.

### **Occupational health and safety**

In the near future, it will only be permitted to use monomeric diisocyanates to a limited extent and their use will be subject to fulfilling certain conditions so as to prevent harmful exposures.

Our need for responsible handling of hazardous raw materials and the increase in occupational health and safety has driven our engineers to peak performances in new development.

As a result of years of work, our innovative EvoKure product range successfully combines outstanding decorative and anti-corrosive properties with protection of human and environmental health.

#### EvoKure is free of monomeric diisocyanates

#### **Conservation of resources**

Our earth only provides a certain guota of resources. Identifying our own carbon footprint, is the first step towards ensuring that the earth remains habitable for all in the future. Today, it is part of the self-image of all modern participants in the global economic process to assess all process steps for ecological sustainability. With its exceptional drying behaviour, EvoKure enables you to significantly reduce your company's energy consumption.

#### EvoKure dries at room temperature

#### **Prevention of emissions**

As a pacesetter for environmentally aware, human habitat design, Lankwitzer Premium Coatings ensures that products comply with the most stringent environmental criteria and that pollutant and emission loads remains as low as possible. Due to its extremely low percentage of volatile organic compounds (>80 % solid content by weight), EvoKure minimises emissions and material consumption. With a VOC share <250 g/l, EvoKure falls below all applicable limit values of the Chem-VOCFarbV for solvent-based paints and varnishes [Chemical law directive limiting emissions of volatile organic compounds (VOCs) by restricting the marketing of solvent-based paints and varnishes].

#### EvoKure is 'VOC-compliant'

### Your contribution to our environment at a glance:

- EvoKure is free of monomeric diisocyanates
- EvoKure dries at room temperature
- EvoKure is 'VOC-compliant'



## QUESTIONS AND ANSWERS

#### Adhesive strength

#### Is EvoKure recoatable with itself?

Yes. EvoKure is recoatable with itself.

#### **Is EvoKure recoatable with other paint systems, e.g. 2-pack PUR paints?** Yes. EvoKure is recoatable with all customary paint systems.

#### Does EvoKure adhere to different substrates?

There are different versions of EvoKure with very good adhesion on bare sheet steel, non-ferrous metals (aluminium, copper, etc.) and various plastics. However, an individual test on the original substrate is recommended in any case.

#### Can EvoKure be applied to other systems, e.g. 2-pack epoxy primer?

Yes. Adhesion on customary primers is assured. However, an individual test on the original substrate is recommended in any case.

### Can EvoKure primer and/or top coat be recoated without sanding after 6 months of storage?

Yes. However, the stored components should be thoroughly cleaned before being coated with EvoKure.

### Application

	Unlil
Is it possible to apply EvoKure electrostatically with Airless/Airmix?	beco
Yes. However, attention must be paid to certain technical parameters which we	
will gladly tell you about in a direct discussion.	Afte
Is special application technology required for EvoKure?	Half
No. See the question on electrostatic application for the exception to this.	How
What manimum film this is a search a smalled bucklets for swith Fueldure?	Evol
What maximum film thicknesses can be applied bubble-free with EvoKure?	
It is easily possible to apply dry film thicknesses of >300 μm bubble-free (even in high-gloss applications)	0.0
	Ge
Can EvoKure also be processed at 80% atmospheric humidity?	Is Ev
Yes. The atmospheric humidity has no effect on drying.	Yes.
Can I process a paint that is still liquid from the previous day and dilute it	Can
further if necessary?	Yes.
Yes. However, the specified pot life (e.g. 24 hours) should not be exceeded.	Are
Denting	Yes.
Drying	res.

#### Is it necessary to bake EvoKure?

No. EvoKure dries thoroughly extremely quickly at room temperature.

### Will EvoKure also cure in a cold workshop? What is the minimum temperature I need in a workshop?

The curing process would even take place at temperatures as low as +5 °C but with a temperature-related drying delay.

#### When is EvoKure hard/scratch-resistant/cured?

nlike conventional paint systems, EvoKure is fully resistant almost immediately after ecoming touch dry.

fter how much drying time is half the final hardness achieved with the top coat? alf the final hardness – degree of dryness 4 – is achieved after 45 minutes.

#### ow quickly is the coated surface sandable?

voKure can be sanded a few minutes after becoming touch dry.

#### eneral

**EvoKure available in all colours?** es. EvoKure is available in all colours.

an EvoKure be provided in different gloss levels – up to high gloss? es. EvoKure is available in all gloss levels.

re there also EvoKure primers? es. EvoKure can be supplied as primer, one-coat and top coat.





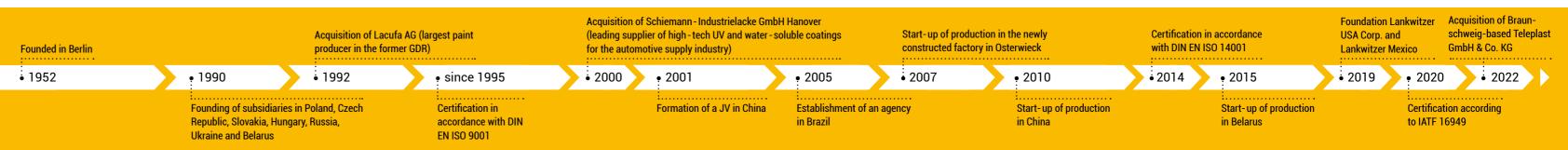
# VALUED WORLDWIDE, MADE IN GERMANY

Founded in 1952, Lankwitzer has established itself worldwide as a premium supplier of industrial coating systems. Lankwitzer's trademarks are top-class quality made in Germany, a high degree of flexibility, outstanding innovative strength and a customer-driven mindset. The key to our success is the global availability of all our products and ongoing customer support provided by a highly-qualified team of developers and technicians.

The highest level of professionalism and a passion for our products ensure that we are a reliable partner for customers around the world as well as a leading manufacturer of cutting edge coating systems in the ACE (agricultural, construction and earth-moving equipment), railway, pipe, automotive and plastic packaging sectors.

As an owner-managed family enterprise, we operate independently, quickly, without hierarchical barriers - and take personal responsibility for our promises.

#### Company history



#### Locations







We have a large number of locations worldwide that stand out due to their infrastructure and the high technical standard of our service and sales staff. Direct networking between the staff of all our subsidiaries drives forward our developments and ensures fast order processing. Our company's success is built on these firm foundations.

#### www.lankwitzer.com

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Lankwitzer Lackfabrik GmbH
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#### Partners who trust us

