



# Protective flooring and coating systems

Applications.  
Systems. Advantages.

Reaction resin systems are not only purely for industrial applications, they are also used in other areas in the commercial, public, and private sector. We can show you where and how they are used.

## Problems Solved.



## Problems Solved. For any requirement.

Ground protection and floor coating systems are a guarantee for long-term use, even in case of severely stressed floor surfaces in public, commercial, and private areas.

Seamless integration of reaction resin systems offers a range of advantages and arguments for application everywhere, where floor surfaces are used and stressed and visual aspects and hygiene requirements also play a role.

High-grade mechanical and chemical-resistant coatings, crack-bridging systems for exterior areas and especially low-emission and even emission-free materials offer solutions for nearly all requirements of modern coating systems, including kindergartens, recreation rooms, balconies and arcades, workshops, automobile dealer display areas, and industrial warehouses.

To master influences that damage subsurface like oil contamination, vapour pressure due to missing negative sealing or negative hydraulic pressure, special reaction resin offers a safe and long-term solution, no matter whether commercial surfaces like workshops or regular cellar rooms in private homes are involved, or beneath high-quality athletic sports tracks in arenas according to Olympic standards.

# Protective flooring and coating systems

Applications. Systems. Advantages.



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# Protective flooring and coating systems

## Application areas and application fields

Reaction resins are used everywhere, where the requirements for chemical and mechanical resistance of product systems are especially high or especially fast further processing is desired. A schematic outline of different reaction resin system application provides an overview:

<b>Application area/use</b>	<b>Stresses</b>	<b>Special properties</b>
Domestic and commercial auxiliary rooms, garages	Low, no high chemical or mechanical stresses	Low slipping prevention, slipping prevention class R9
Commercial floors in workshops and small industrial settings	Light, medium, high	Chemically and mechanically resistant, slipping prevention classes R9, R10, R11
Emissions-sensitive areas such as recreation and waiting rooms	Light, medium, high	Emission-free, slipping prevention classes R9, R10, R11
Balconies, terraces, arcades	Medium, high	Mechanically and UV-resistant, slipping prevention classes R9, R10, R11

### Requirements

#### chemical

- Hygiene
- Chemical resistance
- Protection against fouling

#### mechanical

- Impact resistance
- Abrasion resistance
- Slip prevention

The requirements for floor protection systems are as diverse as their areas of application and application fields. These surfaces can look particularly pretty and impressive, and the visual aspect can be influenced very positively with various design options, colours, and lighting influences. However, the robustness and durability of coated services significantly depends on how carefully the system

layout has been planned, how good and appropriate the subsurface preparation has been completed, and, ultimately, which systems and which methods are used to complete the work. On the following pages, we'll provide you an overview of the necessities, methods, and suitable systems for solving your everyday and special challenges.



Sustainable protection of concrete floors and high-quality visual aspects and aesthetics don't need to be mutually exclusive - we're happy to advise you!



# Subsurface evaluation and preparation

## Methods, requirements and options

One of the most important requirements for permanent success during application of decorative or protective coatings is professional examination, evaluation, and protection of the subsurface. The subsurface must be prepared so that an ideal connection between the concrete surface and the applied system is achieved.

### Inspection

The inspection enables accumulations on the subsurface to be coated (dirt, dust, mortar splashes, etc.), loose and crumbling components, condensate, cracks, and rough unevenness to be determined.

### Testing evenness

The permitted measurement tolerances are described in DIN 18202 "Tolerances in building construction". Inspection takes place with a measuring stick and a measuring wedge.

### Knock test

Knocking with a hammer enables hollow position and thin, hard sinter layers to be detected according to changes in sound patterns.

### Wetting test

Application of water, e.g. with a brush, tests the absorption ability of the subsurface. The water must be absorbed by the subsurface within a short amount of time. If this is not the case, this could be an indicator of high moisture, separating agent residues, cement sludge, or similar.

### Grid scratch test

Diamond-shaped scratches on the surface of the subsurface using the grid scratch testing device enable the surface properties (layers, hardness, etc.) to be evaluated. No breakages may be present at intersections along with simultaneous scratch resistance.

### Moisture measurement

The moisture measurement is a test to determine the suitability of the subsurface for coating, which is measured with a CM measuring device. The max. moisture content for plastic resin priming and coatings is  $\leq 4.0$  CM-%. In case of special priming coats, the moisture may also be higher. Electronic moisture measuring devices can in fact be used for non-destructive measurement, since the exactness nevertheless is not present, but they certainly provide a starting point.

### Pressure resistance test

A rebound hammer (Schmidt hammer) can be used to test the pressure resistance of the concrete at points, non-destructively.

### Crack repair (floor surfaces)

Prior to applying the primer, cracks must be opened cleaning and professionally sealed with injection resin and inserted steel clamps (injection resin system ASODUR-K900 as a secure and clean solution).

### Repairing holes and damaged areas

The evenness of the subsurface must be prepared prior to applying the primer, and a robust, highly durable epoxy resin mortar is especially well-suited (e.g. ASODUR-EMB). Trowels and spatulas as appropriate tools.

### Producing a fillet

A fillet is created in the wall-base

connection area with epoxy resin mortar. This makes a secure connection with the subsequent coatings possible, and damaging influences from chemicals and humidity are able to be prevented.

### Grinding

Flat removal millimetres up to multiple centimetres is possible to level out unevenness.

### Shot peening

The most conventional method for preparing the subsurface to create an equal, open-pored roughness.

### Polishing

Mechanical surface processing with less material removal.

### High-pressure water jets

Uses for poorly accessible floor surfaces and vertical surfaces.

### Sand blasting and water-sand blasting

Removal of adhesion inhibiting surface components on vertical surfaces as well.

### Sweeping and vacuuming

Removal of loose fine particles after the actual surface preparation.

### Surface tensile strength

Specification of surface tensile strength by vertically pulling off an adhered peel-off stamp. The minimum tensile strength for coating work is  $1.5 \text{ N/mm}^2$ .



# Priming, coating, sealing

## Tasks and characteristics

Depending on the subsurface, purpose application, and chemical and mechanical stress, reactance resin systems differ in terms of layer thickness and number of layers. Prime coats protect the subsurface on the rear side and simultaneously represent an adhesive bond for subsequent layers. Coatings form a protective film against chemical and mechanical stresses, and they can be designed visually. Sealers are treatments that form a film on the surface in thin layers.

<b>Application</b>	<b>Task</b>	<b>Layer thickness</b>
Priming	<ul style="list-style-type: none"><li>• Concrete subsurface pore sealing</li><li>• Production of mechanical or chemical connection to subsequent layers</li><li>• Correction of damaging influences from the subsurface (e.g. vapour pressure or oil contamination)</li></ul>	approx. 0.1 - 0.3 mm
Coating	<ul style="list-style-type: none"><li>• Protection of the subsurface against mechanical and chemical influences</li><li>• Optical design of usable areas (colour selection, effect distribution)</li><li>• Increased durability of concrete surfaces</li></ul>	approx. 0.5 - 2.0 mm
Sealing	<ul style="list-style-type: none"><li>• Thin-layer protection of surfaces against UV stress</li><li>• Top seal of bedding layers to prevent slipping and for visual design</li></ul>	approx. 0.1 - 0.3 mm



# Secure priming processes

## Reliable and stable adhesion to the subsurface

Prime coats (also called primer) are mainly used to ensure stable adhesion to the subsurface and the top coating. They offer additional protective functions for additional system structures such as coatings based on epoxy resin, polyurethane, or polyurea. High residual humidity, resulting vapour pressure from the subsurface or damaging influences of subsurface contamination, e.g. with oils or grease can be suppressed with suitable primer coats or even ruled out.

### Primer application

Low-viscosity primers can be applied quickly and securely with short-piled rollers. With a little pressure, the fluid material penetrates every pore of the concrete subsurface permanently, and therefore produces a strong connection between the surface of the subsurface and the subsequent coating. For improved penetration into the pores of the concrete, a hard brush is used, which helps the material penetrate very deeply.

### Sanding

Standard primers based on epoxy resin are sprinkled with fine quartz sand while they are still fresh. The embedded quartz grains produce a secure physical connection to coatings that are applied later or other covers (tiles, natural stone, etc.).

The properties of the respective subsurface and the requirement of the subsequent coating systems specify the selection of suitable primers.

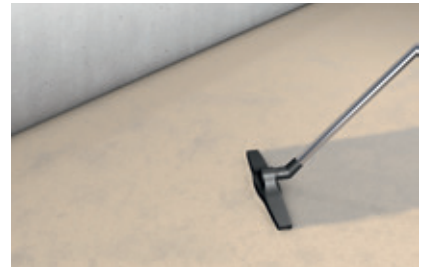
The system 1 on page 16 shows a secure application on oil contaminated/humid subsurface.



1. Application



2. Sprinkling



3. Vacuuming

### INFO BOX

## Easy and secure priming

The better a primer penetrates into the subsurface, the stronger the adherence and therefore the security of the overall system structure. We recommend applying the primer layer with a nylon roller, 6 mm pile, with textured polyamide covering.

Primer application ASODUR-SG3 in the video:







# System primers

Product	Application/ problem	Requirement for subsurface	Advantages
ASODUR-SG2	<ul style="list-style-type: none"> <li>• Oil-contaminated surfaces</li> <li>• High vapour pressure</li> <li>• Negative hydraulic pressure</li> </ul>	Moist, without water film	<ul style="list-style-type: none"> <li>• Penetrates deeply into the pores of the concrete subsurface</li> <li>• High SD value (230 m)</li> <li>• Suitable on oil-contaminated, cleaned concrete surfaces</li> <li>• Radon-proof tested</li> </ul>
ASODUR-SG3	<ul style="list-style-type: none"> <li>• Vapour pressure</li> <li>• High residual moisture</li> <li>• Primer on old tiles</li> <li>• Production of leveling and scratch coat material</li> </ul>	Moist, without water film	<ul style="list-style-type: none"> <li>• Easy processing</li> <li>• No sanding required for the following reaction resin application</li> <li>• VOC-free, fulfils AgBB requirements</li> </ul>
ASODUR-SG3-superfast	<ul style="list-style-type: none"> <li>• High vapour pressure</li> <li>• High residual moisture</li> <li>• Use of priming, mortar, drainage, and casting resin</li> <li>• Time-pressured work</li> <li>• Emission-sensitive areas</li> </ul>	Moist, without water film	<ul style="list-style-type: none"> <li>• Able to be accessed and reworked early on (approx. 3.5 h)</li> <li>• No sanding required for the following reaction resin application</li> <li>• VOC-free, fulfils AgBB requirements</li> <li>• EMICODE-EC1-rating ("very low emission")</li> <li>• Diverse applications = classic universal product</li> </ul>
ASODUR-G1270	<ul style="list-style-type: none"> <li>• For dense-pore primers on dry to lightly moist substrates</li> <li>• Waterproofing for subsurface stabilisation</li> <li>• Production of epoxy resin screed and offset filling</li> </ul>	Dry to lightly moist (max. 4% CM humidity)	<ul style="list-style-type: none"> <li>• Low-price universal primer for "normal" concrete substrates</li> <li>• Stabilising effect</li> <li>• Mechanically resistant</li> </ul>



**ASODUR G1270**  
Versatile epoxy resin



**ASODUR SG2**  
Special primer/oil and vapour barrier



**ASODUR SG3**  
Moisture-blocking epoxy resin primer



**ASODUR SG3-superfast**  
Fast primer, mortar, drainage, and casting resin



# Secure coating processes

## The right application for the desired results

Seamless floor layers are used around the world in commercial, industrial, public, and private projects and are becoming more and more popular thanks to properties like high chemical and mechanical resistance, optical design opportunities, electrical conductance, and consideration of hygienic standards.

Of course, the desired properties are only achieved if these coating systems are applied properly and carefully. Errors evaluating and preparing the subsurface and errors during the mixing process and during application are difficult to correct later on, if they can be corrected at all, which is why the instructions and specifications of the technical documentation must always be followed thoroughly.

With our ASODUR product line, we fulfil the respective specific requirements for industrial settings. Especially good chemical resistance and light traces of wear generally characterise our floor coatings. We also offer system solutions for additional requirements like slipping resistance, UV protection, freedom of emissions, and decorative design options.

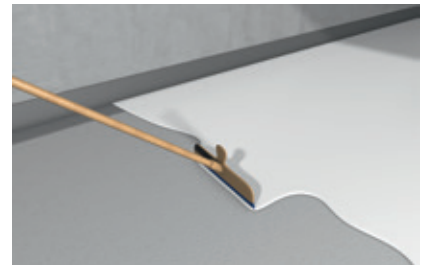
Our systems are tested according to DIN EN 1504-2 and DIN EN 13813. The specified properties are tested and ensured by our own factory-internal production inspections and accredited testing institutes.



1. Clean priming, remove loose quartz sand



2. Pouring



3. Distribution with large-format rake



4. Pricking

### INFO BOX

## Coating correctly

The tools, the process,  
the end result:

Applying ASODUR-B351 in the video:





# System coatings

The application area, the type of coated components, weathering influences like temperature, UV exposure and moisture, and expected application of chemical substances or mechanical influences determine the type and the layout of the respective coating system.

Besides these required characteristics, long life of the coating is always important, and an especially important point for us as well within the scope of our own quality standards.

Requirement	ASODUR-B351	ASODUR-EB/L
High crack bridging	o	++
Abrasion and impact resistance	++	o
High slip resistance	++	++
Physiological harmlessness	+	++
Emission-free	++	o
UV resistance	o	++
Acid and lye resistance	++	o
Light-fast	++	o
Decorative appearance and diverse colours	+	++

o = suitable      + = quite suitable      ++ = very suitable



**ASODUR-B351**  
Universal industrial and commercial floor coating



**ASODUR-EB/L**  
Light-fast, elastic polyurethane coating

## INFO BOX

### Always repot

During mixing in the original container, residual components of the resin components can adhere to the sides of the container, and this endangers secure mixture of the materials.

Repotting ASODUR-B351 in the video:





# Secure sealing processes

## Simple and secure protection of concrete surfaces

Thin-layer surface protection systems, surface finishing for seamless floor coatings and aggregate bedding layers, are called sealing layers. Normally, these products can be applied in spreading, rolling, or spraying processes, and they offer secure protection against light to medium chemical and mechanical stresses on floor and wall surfaces.

One special property of sealing layers is the option of preparing highly resistance coatings to be particularly slip-resistant and still providing them with an aesthetically and optically impressive effect using coloured chips or a selection of a special pigment.

Transparent or colourful-pigment sealing coatings can be created with very little economic resources to produce impressive surfaces, which makes processing and later care extremely easy and able to be completed without high costs.



1. Prepared subsurface



2. Application of sealing



3. Final wearing surface

### INFO BOX

## Application instructions

- We recommend a suitable roller for application of sealing coatings: Nylon roller, 6 mm pile with textured polyamide cover.
- Sealing coats are always applied crosswise using the roller process.
- Before using the roller, remove loose fibre material from it with an adhesive strip.
- The roller's metal clip must be cleaned frequently during application work.

# System sealers

Product	Problem/requirement	Processing
ASODUR-V2250	Transparent matte sealer	Crosswise rolling
ASODUR-V2250 ASODUR-V2257	Light-fast and UV-stable	Crosswise rolling
ASODUR-V2250 ASODUR-V2257 ASODUR-V360W	Plasticiser-resistant (automobile tyres)	Crosswise rolling
ASODUR-V2250 ASODUR-V2257 ASODUR-V360W addition of 8-10 weight % ASO-Antislid to the mixed sealer	Slip-resistant sealing layer	Cross-wise rolling application ASO-Antislid integration
ASODUR-V2250	Emission-free sealing layer	Crosswise rolling
ASODUR-V2250	Protection against bacterial and fungicidal effects	Crosswise rolling
ASODUR-V360W	Sealing for magnesite and calcium-sulphate coating and cast asphalt	Crosswise rolling



**ASODUR-V360W**  
Concrete sealing - aqueous



**ASODUR-V2250**  
Silky matte, bacteria-resistant  
2-K polyurethane acrylate sealer



**ASODUR-V2257**  
TopCoat - pigmented

## INFO BOX

### Tips and tricks for sealers

- Coloured subsurface → transparent sealing
- UV protection against yellowing → pigmented sealing
- Contrast desired? → Mixing in coloured chips attractively enhances the appearance of the surface

Sealer application ASODUR-V2250 in the video:





## Protective flooring and coating systems

### Long-life value with the right selection

Primers, coatings, sealers, and additive products alone offer numerous advantages, but enduring value for the user and for construction contractors in particular is only possible when they are planned and implemented within the correct application and requirement-oriented system structure. As in every system, the weakest link determines the performance limits of this kind of system, and for this reason, the selection and especially the quality of the individual products, also during system configuration, is especially important, and it has a special priority in our daily work in the laboratory, in application technology, and especially in reliable property development.



# Four systems for long-term and secure floor protection



## 1. Difficult substraces

Oil-contaminated concrete surfaces, expected negative water or vapour pressure are frequent application characteristics, especially in commercially utilised areas. With suitable cleaner and special primers, there's nearly no subsurface that cannot be professionally prepared and produced.



## 2. Domestic and commercial auxiliary rooms, garages

Breathable, colourfully pigmented, and transparent sealers can be created at little cost. Upon request, they provide protection against plasticiser absorption, UV stress, chemical effects, plus they can be slip-resistant and emission-free, as well as easy to clean.



## 3. Commercial floors in workshops and small industrial settings

Coating systems are used everywhere, where higher requirements are necessary due to chemical and mechanical influences. Colours and decorative designs as well as slip-resistant properties are able to be implemented with coating systems. In long-term recreation rooms, emission-free coating systems are especially popular.



## 4. Sensitive interior areas, balconies, terraces, arcades

Mainly weather-resistant and slip-preventing coating systems are used in this case. Colourful and decorative designs can be created as required.



# System 1

## Difficult substrates



Specific cleaning with our special cleaner ASO-R008 enables removal of stubborn fouling, e.g. oil. In order to prevent further oil fouling or rising humidity, the primer is applied with the highly water vapour-blocking priming coat ASODUR-SG2.

Product	Problem/requirement	Processing
ASO-R008	Oil contamination in subsurface	Brushing
ASODUR-K900	Cracks in subsurface	Slicing in the lengthwise or crosswise direction, nailing, and casting
ASO-R008 ASODUR-SG2 Quartz sand spreading 0.5 - 1.0 mm	Rising moisture and oil contamination in subsurface Adhesive bond for subsequent coatings, scratch coats, smoothing	Brushing Brushing and rolling Spreading
ASODUR-G1270 ASODUR-EMB	Breakage, damaged areas, levelling	Pre-priming in the area of breakage, fresh levelling using the smoothing process
Scratch coat from mixture ASODUR-G1270 + quartz sand	Uneven, rough subsurface	Smoothing
ASODUR-SG2 Quartz sand spreading 0.5 - 1.0 mm	Residual moisture > 4 CM-%, negative hydraulic pressure, radon exposure Adhesive bond for subsequent coatings and scratch coats	Brushing Brushing and rolling Spreading





# System 2

Domestic and commercial auxiliary rooms, garages



In nearly every apartment building, in basements, in every garage, and in auxiliary buildings, there are concrete surfaces that are worn or damaged after years of use. The surface protection system based on the aqueous universal sealer ASODUR-V360W is perfect for this, which is a solvent-free material.

<b>Product</b>	<b>Problem/requirement</b>	<b>Processing</b>
ASODUR-K900	Cracks in subsurface	Slicing in the lengthwise or crosswise direction, nailing, and casting
ASODUR-G1270 ASODUR-EMB	Wall-floor connection	Pre-priming in the area of fillet, fresh creation of the fillet using the smoothing process
ASODUR-V360W with 8-10 weight-% clean water	Apply primer	Crosswise rolling process
ASODUR-V360W and addition of 3 weight-% ASO-FF	Seal concaves projecting formations and pinholes	Smooth, polish after approx. 1-2 hours with sand paper (100 grain)
ASODUR-V360W and addition of 50 weight-% quartz sand 0.1-0.35 mm	Equalise unevenness up to max. 2 mm	Smoothing
ASODUR-V360W and addition of 10 weight-% ASO-Antislid	Slip-resistant sealing layer	Crosswise rolling process



# System 3

## Commercial floors in workshops and small industrial settings



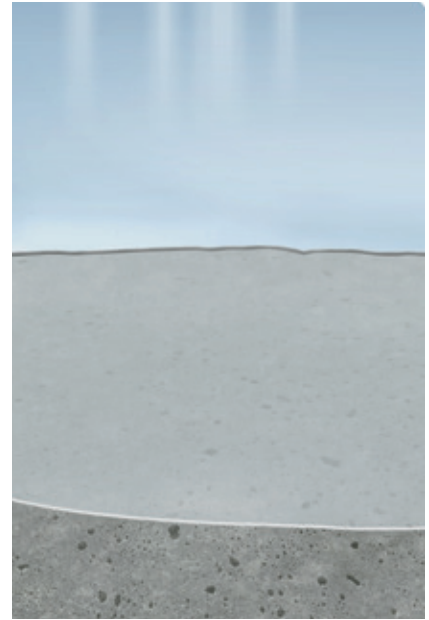
Epoxy resin layers are successfully applied around the world for protecting finished concrete floors, including our ASODUR-B351, which has been tried and tested for years. With this mechanically and chemically robust coating, which is certified as food-safe, floor surfaces are able to be designed in a variety of ways.

Product	Problem/requirement	Processing
ASODUR-K900	Cracks in subsurface	Slicing in the lengthwise or crosswise direction, nailing, and casting
ASODUR-G1270 cover with quartz sand	Mechanical adhesive bond for subsequent coatings	Spreading
ASODUR-G1270 ASODUR-EMB	Wall-floor connection Breakage and damaged areas	Pre-priming in the area of fillet, fresh creation of the fillet or for levelling using the smoothing process
ASODUR-B351	Smooth thin levelling coat without QS filling up to approx. 1.5 mm	Smoothing process
ASODUR-B351 Quartz sand 0.1 - 0.6 mm	Smooth thick levelling coat with QS filling > 1.5 mm, cost savings, for increased mechanical stresses	Smoothing process
Spiked ventilation roller	Air bubbles and uneven fresh levelling coat	Crosswise rolling process
ASODUR-B351 + DecorChips ASODUR-V2250 + ASO-Antislid	Decorative slip-resistant levelling coat	Cover fresh levelling coat with coloured chips, fill cover coating with glass beads and roll on
ASODUR-B351 Quartz sand	Slip-resistant top sealing coat	Roll on bedding layer and sand down, top sealing coat in rolling process



# System 4

Sensitive interior areas, balconies, terraces, arcades



The 2C-PU-coating ASODUR-EB/L is the first levelling coating developed purely for balcony, terrace, and arcade coating applications that is certified VOC-free and analogous to the AgBB formula, which makes it suitable for use in recreation rooms and other interior areas.

Product	Problem/requirement	Processing
ASODUR-K900	Cracks in subsurface	Slicing in the lengthwise or crosswise direction, nailing, and casting
ASODUR-SG3	Chemical adhesive bond for subsequent coatings	Crosswise rolling process
ASODUR-SG3-superfast	Time-pressured work	Crosswise rolling process
ASODUR-SG3 or ASODUR-SG3-superfast ASODUR-EMB	Wall-floor connection Breakage and damaged areas	Pre-priming in the area of fillet, fresh creation of the fillet or for levelling using the smoothing process
ASODUR-EB/L + DecorChips ASODUR-V2250 + ASO-Antislide	Decorative, slip-resistant, light-fast, and UV-stable levelling coat	Cover fresh levelling coat with coloured chips, fill cover coating with glass beads and roll on
ASODUR-EB/L	Emission-free interior room coating, light-fast and elastic	Smoothing process
Spiked ventilation roller	Air bubbles and uneven fresh levelling coat	Crosswise rolling process
ASODUR-EB/L	Light-fast and UV-stable, elastic coating	Smoothing process



# Additional products

## Product

ASODUR-EMB  
2C epoxy resin mortar, highly durable



## Application areas/properties

Used to repair cement-bonded surfaces in industrial construction, on concrete surfaces, on ramps, and to produce fillets, very high compressive and flexural strength, waterproof after 10 mm thickness

## Description

Layer thickness:  $\geq 3 \text{ mm} \leq 50 \text{ mm}$ , selectively up to  $1 \text{ m}^2 \leq 100 \text{ mm}$   
Compressive strength: approx.  $100 \text{ N/mm}^2$   
Colour: grey  
Container: 8 kg, 20 kg  
Use: approx.  $2.0 \text{ kg/m}^2/\text{mm}$   
Fillet (radius 5 cm): approx.  $1.8 \text{ kg/m}$

ASODUR-K4031  
2C epoxy resin universal adhesive, stable



Use in the ASO-Tape system, as adhesive for concrete on concrete and for inserting reinforcing rods, as smoothing bulk and repair mortar, waterproof up to 5 bar after 10 mm thickness, resistant to diluted acids, lye, and water mixtures aggressive to concrete, non-shrinking, also adheres to moist subsurfaces without primer

Minimum adhering layer thickness: 2 mm  
Tested according to DIN EN 1504-4  
Compressive strength: approx.  $60 \text{ N/mm}^2$   
Colour: grey  
Container: 6 kg (4 kg + 2 kg)  
Use: approx.  $1.6 \text{ kg/m}^2/\text{mm}$

ASODUR-K900  
Casting and adhesive resin



For force-fitting casting in cracks and joints without a mixer, easy to use

Chemical, water, and frost-resistant, low-viscosity  
Colour: transparent yellowish  
Use: depending on application

ASODUR-R008  
Oil, industrial floor cleaner and care product, aqueous, solvent-free



Used to clean severe, even oil-fouled surfaces consisting of concrete, stone, ceramic, screed, metal. System product bonded with ASODUR-SG2, removes rubber abrasions on coatings, suitable as maintenance cleaner for coatings

Concentrate, dilute with water  
Phosphate-free, environmentally friendly  
Colour: transparent  
Container: 1 l (6/box), 10 l  
Use: depending on application and fouling, see technical documentation



## Product

INDUFLEX-MS  
Elastic MS hybrid-polymer joint sealant



## Application areas/properties

Use in JGS systems and outdoor containers with high organic acid content, stable against hydraulic pressure up to 1 bar, adheres well on concrete, steel, masonry, high UV resistance

## Description

Permitted deformation: 20%  
Up to 40 mm joint width passable, up to 20 mm drivable  
Colour: black  
Container: 600 ml (15/box)  
Use: e.g. 20x 17 mm seam = 1.75 m per 600 ml bag

INDUFLEX-PS  
2C-polysulfide joint sealant,  
medium viscosity



Use inside and outside between passable and drivable components, e.g. parking decks, airports, industrial surfaces, path construction, road and rail construction, asphalt surfaces, suitable for angles up to 10%

Permitted deformation: 25%  
Up to 65 mm joint width  
Colour: grey  
Container: 10 l (9.42 l + 0.58 l)  
Use: e.g. 10x 8 mm seam = 80 ml per metre seam

INDUFLEX-PU  
Elastic 1C-PU joint sealant



Use in parking garages, concrete open areas, civic drainage systems, large-scale kitchens, high chemical and mechanical durability

Permitted deformation: 25%  
Up to 40 mm joint width  
Colour: grey  
Container: 600 ml (6/box)  
Use: e.g. 10x10 mm seam = 6 m per 600 ml bag



More additive products and system components are available on our website: [schomburg.com](http://schomburg.com)

# Tools and protective equipment for processing reaction resins



**Nitrile gloves**  
Secure protection against skin contact



**Breathing protection**  
Filters inhaled air



**Safety glasses**  
Also for eyeglass wearers



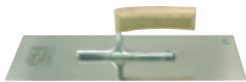
**Spiked shoes**  
Protection against damage to fresh floor coatings, primer, and sealing coats and smoothing bulk



**Trowel**  
Standard tool for mixing, finishing, scraping, transferring material



**Mixing bucket**  
Available in different sizes and shapes, depending on the product



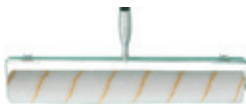
**Smoothing trowel**  
Suitable for applying and smoothing all materials, especially bulk capable of being smoothed



**Toothed trowel**  
For controlled application in specific layer thicknesses



**Round trowel**  
For producing fillets



**Surface roller**  
Enables speedy and consistent application of low-viscosity materials



**Spiked roller**  
For distributing and ventilating filler materials and coatings


















**Floor scraper**  
Safely removes residue from excess sand and old materials

With friendly support from POLYPLAN® tools ([www.polyplan.com](http://www.polyplan.com)).

# Standard colours



## **ASODUR®-B351 / ASODUR®-V360W**

	approx. RAL 1001
	approx. RAL 1015
	approx. RAL 3009
	approx. RAL 5014
	approx. RAL 6011
	approx. RAL 7016
	approx. RAL 7023
	approx. RAL 7030
	approx. RAL 7032
	approx. RAL 7035
	approx. RAL 7037
	approx. RAL 7038
	approx. RAL 7040
	approx. RAL 7042
	approx. RAL 9002

Note: Additional colours are available upon request.  
In this case, please contact our customer management service.

# Dew point table

## based on relative humidity and temperature

The dew point temperature is the temperature at which the air is saturated with water vapour. The lower the temperature, the less water vapour the air can absorb. If the temperature drops to the dew point temperature, for example on cooler wall surfaces, condensation of water vapour will result. When completing coating work, especially at high temperatures and/or high humidity, always observe the dew point temperature.

Air temperature (°C)	Dew point temperature in °C at a relative humidity of <sup>1)</sup>															
	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%
2	-18.6	-16.0	-13.8	-11.9	-10.2	-8.7	-7.3	-6.1	-4.9	-3.9	-2.9	-2.0	-1.1	-0.3	0.5	1.3
4	-16.9	-14.3	-12.0	-10.1	-8.4	-6.9	-5.5	-4.2	-3.1	-2.0	-1.0	0.0	0.9	1.7	2.5	3.3
6	-15.3	-12.5	-10.3	-8.3	-6.6	-5.0	-3.6	-2.3	-1.2	-0.1	1.0	1.9	2.8	3.7	4.5	5.3
8	-13.6	-10.8	-8.5	-6.5	-4.8	-3.2	-1.8	-0.5	0.7	1.9	2.9	3.9	4.8	5.7	6.5	7.3
10	-11.9	-9.1	-6.8	-4.7	-2.9	-1.4	0.1	1.4	2.6	3.8	4.8	5.8	6.7	7.6	8.5	9.3
12	-10.2	-7.4	-5.0	-3.0	-1.1	0.5	1.9	3.3	4.5	5.7	6.7	7.8	8.7	9.6	10.5	11.3
14	-8.6	-5.7	-3.3	-1.2	0.7	2.3	3.8	5.2	6.4	7.6	8.7	9.7	10.7	11.6	12.4	13.3
15	-7.7	-4.8	-2.4	-0.3	1.6	3.2	4.7	6.1	7.4	8.5	9.6	10.7	11.6	12.6	13.4	14.3
16	-6.9	-4.0	-1.5	0.6	2.5	4.1	5.6	7.0	8.3	9.5	10.6	11.6	12.6	13.5	14.4	15.3
17	-6.1	-3.1	-0.7	1.5	3.4	5.0	6.6	8.0	9.2	10.4	11.6	12.6	13.6	14.5	15.4	16.3
18	-5.3	-2.3	0.2	2.4	4.3	5.9	7.5	8.9	10.2	11.4	12.5	13.6	14.6	15.5	16.4	17.3
19	-4.4	-1.4	1.1	3.2	5.2	6.9	8.4	9.8	11.1	12.3	13.5	14.5	15.5	16.5	17.4	18.2
20	-3.6	-0.6	2.0	4.1	6.1	7.8	9.3	10.8	12.1	13.3	14.4	15.5	16.5	17.5	18.4	19.2
21	-2.8	0.3	2.8	5.0	6.9	8.7	10.2	11.7	13.0	14.2	15.4	16.5	17.5	18.5	19.4	20.2
22	-1.9	1.1	3.7	5.9	7.8	9.6	11.2	12.6	13.9	15.2	16.3	17.4	18.5	19.4	20.4	21.2
23	-1.1	2.0	4.6	6.8	8.7	10.5	12.1	13.5	14.9	16.1	17.3	18.4	19.4	20.4	21.3	22.2
24	-0.3	2.8	5.4	7.7	9.6	11.4	13.0	14.5	15.8	17.1	18.3	19.4	20.4	21.4	22.3	23.2
25	0.5	3.7	6.3	8.5	10.5	12.3	13.9	15.4	16.8	18.0	19.2	20.3	21.4	22.4	23.3	24.2
26	1.4	4.5	7.2	9.4	11.4	13.2	14.8	16.3	17.7	19.0	20.2	21.3	22.4	23.4	24.3	25.2
28	3.0	6.2	8.9	11.2	13.2	15.0	16.7	18.2	19.6	20.9	22.1	23.2	24.3	25.3	26.3	27.2
30	4.7	7.9	10.6	12.9	15.0	16.8	18.5	20.0	21.5	22.8	24.0	25.2	26.2	27.3	28.3	29.2
32	6.3	9.6	12.3	14.7	16.8	18.7	20.3	21.9	23.3	24.7	25.9	27.1	28.2	29.2	30.2	31.2
34	7.9	11.3	14.0	16.4	18.6	20.5	22.2	23.8	25.2	26.6	27.8	29.0	30.1	31.2	32.2	33.2
36	9.6	12.9	15.8	18.2	20.3	22.3	24.0	25.6	27.1	28.5	29.7	30.9	32.1	33.2	34.2	35.1
38	11.2	14.6	17.5	19.9	22.1	24.1	25.8	27.5	28.9	30.3	31.6	32.9	34.0	35.1	36.1	37.1
40	12.8	16.3	19.2	21.7	23.9	25.9	27.7	29.3	30.8	32.2	33.5	34.8	36.0	37.1	38.1	39.1

<sup>1)</sup> The dew point table indicates at which surface temperatures condensate occurs, depending on the air temperature and the relative humidity.  
 Example: At +22°C air temperature and 60% relative humidity, the dew point for an project temperature is +13.9°C. If the surface thermometer indicates a value below **+16.9°C (+13.9°C + 3°C safety factor)**, no coating work is possible.



# Glossary



## **Abrasion resistance**

Abrasion resistance refers to the resistance of fixed surfaces to mechanical stress, especially abrasion. This is determined by the surface properties of the materials involved, but mainly the roughness and hardness. In practice, tyres and rollers consisting of different materials frequently feature coatings or seals, especially to transfer shearing and thrusting forces.

## **Adhesive tensile strength**

The adhesive tensile strength acts as a guideline for adhesion of layers on surfaces, e.g. on concrete subsurfaces. It is determined using the adhesive pull test, which is completed with special adhesive pull devices and defined testing stamps.

## **AgBB**

In order to provide the basis for a unified and reliable health evaluation of construction products in Germany, the German Committee for Health Evaluation of Construction products (AgBB) has created testing criteria and developed an evaluation scheme for VOC emissions of relevant interior space construction products on this basis. The evaluation scheme sets health-related quality benchmarks for the production of construction products for interior spaces and is intended to support the development of especially low-emission products.

## **Aqueous layer/sealing**

Materials with viscosity that was produced using water or that may be diluted with water for processing.

## **Carbamate formation/ white discolouration**

In case of incorrect or unprofessional application of EP coating materials, a reaction with CO<sub>2</sub> and water from the ambient air (dew point or rain) can lead to whitish discolouration on the material surfaces, which can lead to adhering problems in certain cases during the application of subsequent materials (e.g. on primers).

## **CE labelling**

Material designation as per EU law concerning defined products and product classes with regard to product safety. In this way, the respective manufacturer confirms that their product corresponds with the applicable EU directives. Products rated in this way must feature a CE label so that the manufacturer is able to distribute them, and so that they are able to be used or processed further properly.

## **Chemical durability**

Chemical durability generally refers to the resistance of materials to the effects of chemicals (e.g. acids, lye, solvents, concentrated cleaners, etc.).

## **CM moisture**

Residual moisture content of a building concrete, putty, screed, etc., determined according to the so-called CM measuring process according to the calcium carbide method.

## **Compressive strength**

Compressive strength refers to the ability of a material to resist the effects of compressive forces. The compressive strength is the quotient of the breaking load and the cross-section surface A of a test body.

## **Crack bridging**

This defines the ability of a coating to bridge cracks present in the subsurface (dynamic or static).

## **Curing**

During the reaction process, until the final stability is achieved.

## **Curing agent**

A component that is mixed with the resin component to start the reaction process and start hardening of the material. In this case, the prescribed mixing ratio must essentially be observed and maintained to ensure the desired material properties.

## **Dew point temperature**

The dew point, also referred to as the dew point temperature, is the temperature of air with a certain humidity and constant pressure that must be exceeded for water vapour to precipitate as dew or mist. The more water vapour the air contains, the higher its dew point temperature will be.

## **Epoxy resin (EP)**

Epoxy resins (EP resins) are plastic resins that carry epoxy groups. These are curing resins (reaction resins) that are able to be converted to duroplastic surfaces with a curing agent and additional materials as required. Epoxy resins are polyethers that normally contain two terminal epoxy groups.

## **Filling material**

External or previously introduced additives for changing the processing consistency or system properties of a material, for example a coating (e.g. for use on inclines).

## **Fire behaviour, fire inspection**

The fire behaviour of different materials is recorded and rated according to different classes, which results in suitability or limitations involving the application areas of building materials.

## **Floor coating**

Functional or protective layer with the purpose of increasing the durability and life span of floor surfaces, while simultaneously taking aesthetic aspects into consideration.

## **Humidity content**

The humidity content of construction materials like concrete, cement screed, etc. defines the weight percent component of water in the respective subsurface. For completion of subsequent material applications like epoxy resin coatings, there are threshold values related to the type of subsurface (4 weight-% for cement-bonded subsurfaces, 0.5-1.0 weight-% for anhydrous or calcium sulphate-bound subsurfaces).



# Glossary

## Hydraulic pressure

In the physical sense, hydraulic pressure indicates the hydrostatic pressure within the water. As water depth increases, the surrounding pressure also increases, measured in bar. This is called the water column.

## Levelling

See offsetting layer.

## Load classes

Evaluation of the load grade that is capable of affecting the floor coating, e.g.:  
- low stress = only pedestrian traffic, max. wheelchairs, - medium stress = forklift traffic with max. 1 to load, - high stress = lift truck or delivery truck traffic

## Mixing ratio

The mixing ratio described in the documentation (technical data sheet, container label) indicates the ratio of quantities (in KG or litres) of the components that should be mixed in a defined way, e.g. resin and curing components.

## Offsetting layer

Intermediate layer to compensate unevenness on the subsurface (also called the adjusting surface), based on mineral or reaction resin.

## Polyurea (PUA)

Polyurea materials are polymers that are produced by poly-addition of isocyanates and amines. The polymer possesses a structural element that is similar to that of urea. Structurally, they are included in the aminoplasts.

## Polyurethane (PU/PUR)

Polyurethane (PU, DIN abbreviation: PUR) are plastics or artificial resins that result from the poly-addition reaction of diols and polyols with polyisocyanates. Depending on their production, polyurethanes can be hard and brittle or soft and elastic.

## Primer

See priming.

## Priming

The priming coat (often called the primer) is used to protect a subsurface with an initial layer and simultaneously improve adhering properties for one or more layers that still need to be added, e.g. to produce an equally distributed suction characteristic. A primer can also be used to apply a subsequent coating securely on a normally unsuitable subsurface.

## Processing temperature

The temperature range (normally the minimum and maximum temperature), which must be maintained while processing a material. The exact and specific information about this (air temperature, component temperature, material temperature) is provided in the respective technical data sheets.

## Processing time

The period in which the material possesses a consistency that allows it to be processed, depending on the ambient temperature and applicable quantity.

## Quartz sand

Mineral additive featuring various grains to fill out and bed priming coats, coatings, and sealing. Together with reaction resins, only fire-cured quartz sand is used.

## Reaction resin

Fluid artificial resin that cures by chemical reaction.

## Repotting

An important step during the mixing process of reaction resins containing 2 or more components. If the original container is used for mixing, unmixed material often remains adhered to container edges, which can cause heterogeneity and subsequent curing problems. In order to avoid this, reaction resins should be put into another mixing container after thorough mixing in the original container and then mixed further to ensure homogeneity.

## Residual moisture

Concrete components or other cement-bonded materials and wooden construction materials always contain a certain residual or offsetting moisture, depending on the age and environmental conditions. Normally, cement-bonded subsurfaces under coatings should not exceed a residual moisture content of 4%.

## Reverse (negative) moisture penetration

Entry of moisture (with or without hydraulic pressure) from the reverse side of a subsurface, for example in case of a lack of, insufficient, or damaged seal from outside or due to a substructure that is still too fresh (excessive water in the concrete). In case these effects appear, a primer featuring a corresponding blocking effect or a coating material that is itself capable of diffusing water vapour must be applied prior to the addition of coatings.

## Sanding

Bedding with quartz sand for primer coats, coatings, or seals to improve adherence of subsequent layers and to produce a slip-resistant surface. In this case, only fire-cured quartz sand featuring a specific grain is used.

## Scratch coat

A thin layer of EP or PU reaction resin applied with the scraping process that is filled with mineral additives (e.g. quartz sand). This layer is used to create a surface and improved adhesion for subsequent layers.

## Sealing

A thin protective layer, transparent or pigmented, which is used to protect the visual design of surfaces (e.g. concrete, EP coatings) and which is also used as a top sealing coat on bedded coatings.

## Shot peening (Blastrac peening)

Shot peening or shot peen reinforcement is a special area of application involved in peening subsurfaces like concrete. The name shot peening refers to the use of shot-formed peening material. Shot peening is a surface treatment used mainly for horizontal surfaces.



### **Slip prevention**

Property of a surface that describes the resistance of a surface against sliding friction caused by people. This resistance is measured by a walking process on an inclined surface. Depending on the incline angle, the slip-preventing property of a coating system is classified in 5 rating groups (R9 to R13).

### **Solvent-free**

A reaction resin product qualifies as solvent-free (without solvents) if the solvent component (e.g. from impurities) is less than 0.5%.

### **Storage stability**

The best-before period, during which the material may be used without limitations, provided it has been stored according to the specifications in the technical documentation.

### **Subsurface preparation**

After evaluation of the subsurface, substrates like concrete or cement screed must be prepared comprehensively for subsequent coating work, e.g. to remove cement sludge, other loosely adhering layers, grease, oil, and other substrates from the subsurface or to prepare the concrete with open pores. Methods include shot peening, high-pressure water jets, grinding, and polishing. A primer is also used to prepare a subsurface.

### **Surface hardness**

The surface hardness is the mechanical resistance that a surface (e.g. an EP coating) offers to counteract the penetration of foreign objects, for example when measured with a steel ball. Depending on the effect, different hardness levels are indicated.

### **Top sealing**

This term describes sealing (e.g. with a low-viscosity PU resin) on a surface that has been bedded with quartz sand or other slip-resistant materials.

### **UV resistance**

The property of a surface like a coating or seal to resist damage from UV exposure, e.g. direct sunlight.

### **Vapour diffusion**

Vapour diffusion refers to the transmission of humid air through a component, which is also able to produce a measurable pressure, e.g. visible in the form of bubble formation in layers.

### **Viscosity**

Measure of the flow properties of a fluid. The lower the viscosity the runnier and therefore more flow-capable the material is, while the greater the viscosity the thicker and less flow-capable the material is. The measuring unit is mPas.

### **Wear resistance**

Measurable resistance of a surface to mechanical stresses. Wear resistance information for reaction resin coatings are normally designated according to DIN EN 13813 with AR (Abrasion Resistance) and the so-called abrasion depth in micrometres according to table 5 of the standard.

The SCHOMBURG group of companies develops, produces and distributes construction materials systems for the areas of:

- Waterproofing and Restoration
- Tiles/Natural Stone/Screed installation
- Protective Flooring/Coating Systems
- Concrete Technology

SCHOMBURG is recognised for its development competency and is distinguished both nationally and internationally with over 80 years in the market. System based construction products from its own production plants are held in high esteem throughout the world.

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