

# COSMO® Adhesives

Bonding & cleaning in window and door construction



# Together toward success

## A strong partner



Quality, service and high delivery reliability are the basic pillars of the success of our group of companies. We have continuously improved and further developed our portfolio in the last years; this also includes the acquisition of new companies. By now, about 325 employees at four sites participate in the success of our group.



### Company

By pooling the core competences of our business segments of adhesives and sandwich panels under a single roof, we are able to offer solutions from one source to our customers that are efficient and of high technical quality.

We are among the leading manufacturers in these two business segments in Europe and moreover, we also increasingly sell our products outside of Europe, such as in China, Russia and the USA.



### Company history

Since the company's foundation in 1815, Weiss has developed from a small hide-glue producer to an internationally acting, industrial company for modern adhesive systems and composite panels. With a passion for quality and the aspiration to meet our customers' high expectations, we are a recognised and reliable partner on the market.

## Powerful product range

### Business area Adhesives

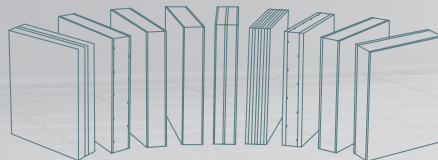


#### Durably firm joints

Traditional joining technologies like riveting, soldering, welding, or screwing, will increasingly be replaced by modern adhesive systems, resulting in many advantages.

Our product range includes more than 400 variants of surface and construction adhesive and superglues, as well as special adhesives for a wide variety of applications.

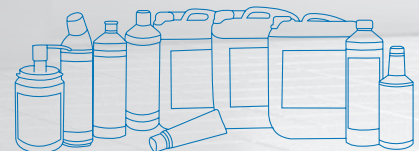
### Business area Composite panels



#### Unlimited possibilities for design


Our range of products includes more than 5,000 variants of composite panels. Because there is a large number of top coats and core materials available as well as the possibility of combining and processing them in many different ways, a vast number of creative designs results for the finished element.

### PUDOL Cleaning and care agent



#### Cleanliness refreshes your senses

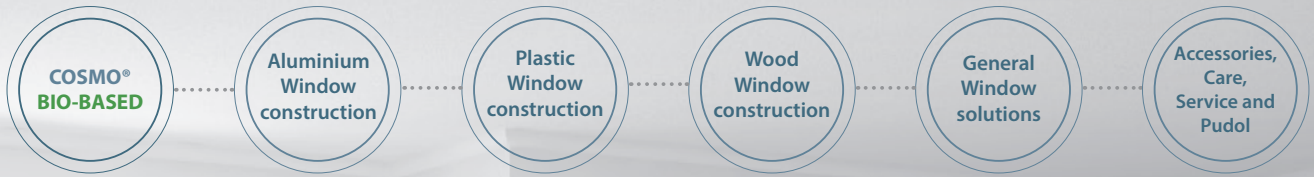
PUDOL stands for convincing quality of special products in the field of commercial cleaning. In addition to a complete range of cleaning and care products for different applications, we are offering a comprehensive service with interesting solutions and benefits.

 A subsidiary of the Weiss Group

 Weiss is the only enterprise that produces adhesives and composite panels.

# Solutions for windows and doors

Our comprehensive range for production and assembly



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Bio-based adhesive & cleaning agent


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Bonding, sealing & cleaning


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Bonding, sealing & cleaning

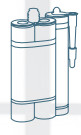
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Bonding


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Bonding of EPDM, RAL assembly, Repair & forming


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Weiss: your competent and strong partner


 Aluminium windows, doors, folding shutters & insect screens  
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 Aluminium windows, doors, folding shutters & insect screens  
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## Certifications

**Low-emission adhesives from Weiss /** [www.emicode.de](http://www.emicode.de)

**GEV-EMICODE®-licensed products**

EMICODE® is a recognised standard for construction products (adhesives, amongst others) promoting healthy living and is a quality label for the proof of low VOC-emissions. Products labelled with EMICODE® are modern, solvent-free and low-emission construction products.



**The "DIN-certified bio-based" label /** [www.dincertco.de](http://www.dincertco.de)

A neutral and transparent quality label regarding the content of bio-based carbon and the product quality makes finding resource-efficient products easier. By using the "DIN-certified bio-based" label, it is certified that we use bio-based raw materials and undergo regular monitoring.



8C092

# Sustainable and environmentally friendly products

The results of successful research and development

## COSMO<sup>®</sup> BIOBASED



### **Environmental "Thinking" instead of waiting**

The world's population is increasing - but our fossil resources are decreasing. So, more than ever before, it is essential to think of a sustainable future! Exactly for these reasons, sustainability, particularly regarding environmental protection, is of particular importance. It is therefore also an important subject for Weiss, not only for today, but also for future generations.

Responsible management of our water protection, exhaust gasses, and waste cycles already form part of our firmly established standards. And now, to further optimize our utilization of resources, we are concentrating on replacing fossil fuels in our adhesives with renewable resources.



### **Ecological sustainability - bio-based adhesives**

Our bio-based adhesives actively contribute to the protection of the environment: As innovative products, they have been developed with particular regard to our limited resources, without losing sight of the top quality that we take for granted.

To a large extent, many of these raw materials produced by agricultural and silvicultural processes are climate-neutral. This way, no increase of CO<sub>2</sub> emissions will be generated in the future. Environmental and limited resources will be protected for further generations. In the meantime, there are numerous possibilities for processing the most diverse bio-based materials such as starch, vegetable oil, resins, lignins, proteins, and others. It is also possible to use renewable raw materials in adhesives. By substituting fossil resources, we have succeeded in developing adhesives on the basis of bio-based products.



### **Optimization of our adhesives**

Our bio-based adhesives include a high content of raw material from renewable sources. Simultaneously we are further improving their already very good properties. Sustainable quality....**made by Weiss!**



# Bio-based adhesive & cleaning agent

We always have our environment in mind



## Corner angle bonding in aluminium window construction

### COSMO® PU-200.900

2-C-PUR reaction adhesive

- H351 no marking required
- UV colourfast

Bio-based carbon content: 59 %



8C160



## Surface bonding on doors

### COSMO® PU-220.900

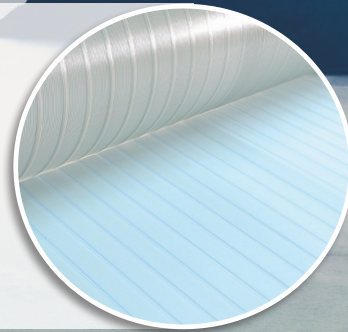
2-C-PUR reaction adhesive

- Good adhesive properties to different surface materials
- Flame resistant after curing

Bio-based carbon content: 60 %



8C159



## Bonding of window joint tapes / RAL assembly

### COSMO® DS-470.900

1-C dispersion adhesive

- Good application at low temperatures
- Fast curing

Bio-based carbon content: 47 %



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# Corner angle bonding

Aluminium windows, doors, folding shutters & insect screens



## Injection method

For profile systems where the adhesive is injected into the profile through a specially positioned borehole.



## Classic method

Before joining the profiles, the corner angle adhesive is inserted in the profile chambers directly from the cartridge or applied by a spatula.

### 1-component (1-C) adhesives

### 2-component (2-C) adhesives



1-C adhesive	Adhesive base	Shore hardness	Film hardness	Skinning time [min]	Viscosity	Particularities
COSMO® PU-180.120	Polyurethane	75D	Tough-elastic	18	Low viscous	Long skinning time
COSMO® PU-100.130	Polyurethane	60D	Tough-elastic	7	Medium viscous	Metal pro
COSMO® HD-100.110	STP hybrid	72A	Elastic	9	Low viscous	Free from H351   UV colour-fast
COSMO® HD-100.450	STP hybrid	60A	Elastic	6	Medium viscous	Free from H351   UV colour-fast

2-C adhesive	Adhesive base	Shore hardness	Film hardness	Skinning time [min]	Viscosity	Particularities
COSMO® PU-200.280	Polyurethane	85D	Tough-hard	60	Low viscous	High-strength
COSMO® PU-200.310	Polyurethane	85D	Tough-hard	20	Low viscous	Fast response time
COSMO® PU-200.334	Polyurethane	65D	Semi-hard	50	Low viscous	Semi-hard adhesive joint
COSMO® PU-200.350	Polyurethane	80D	Tough-hard	30	Low viscous	Free from H351 UV colour-fast
COSMO® PU-200.500	Polyurethane	72D	Tough-hard	23	Low viscous	High-strength Free from H351 without training
COSMO® EP-200.110	Epoxy resin	85D	Tough-hard	60	Medium viscous	Free from H351
COSMO® HD-200.101	STP hybrid	63A	Elastic	30	Low viscous	Free from H351 UV colour-fast
COSMO® HD-200.201	MS hybrid	48A	Elastic	40	Low viscous	Free from H351 UV colour-fast
COSMO® PU-200.900	Polyurethane	80D	Tough-hard	25	Low viscous	approx. 60 % bio-based

# Corner angle bonding, sealing & cleaning

Aluminium windows, doors, folding shutters & insect screens

## Sealing of cut edges of sections

To prevent bare aluminium cut edges from corroding, they must be effectively protected against air and moisture.



### Corrosion sealant

**COSMO® HD-100.411**

Colour: grey (also available in white and black)



### 2-C-MS-Adhesive & Corrosion sealant

**COSMO® HD-200.101**

**COSMO® HD-200.201**

Colour: grey



## Cleaning

Cleaning of aluminium and powder coated as well as anodised surfaces.



### Aluminium cleaning agent

#### Non-etching

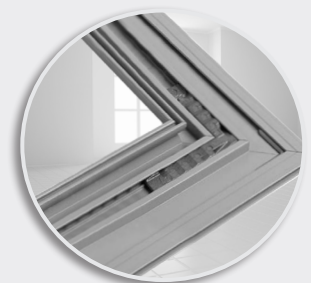
**COSMO® CL-300.150**

Removes fresh adhesive residues, dust, grease pencil, rubber residues and fresh PU foam.



## Bonding of corner angles in aluminium facing formworks

In order to refine the windows, aluminium facing formworks are placed on existing windows. The individual aluminium profile formworks are joined to a frame at the mitred corners with corner connectors made of die cast aluminium and bonded forced-locked.



### 1-C MS adhesive **COSMO® HD-100.400**

Very low-emission 1-C- hybrid reaction adhesive

#### Special Properties

- High strength
- Elastic adhesive joint
- UV colourfast

Colour: white, also available in grey and black



### 2-C STP adhesive **COSMO® HD-200.101**

Fast and controlled curing

2-C-Hybrid reaction adhesive

#### Special Properties

- Elastic adhesive joint
- UV colourfast
- Also applicable as corrosion sealant

Colour: grey

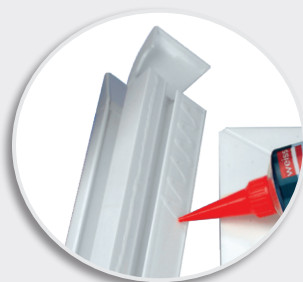


#### Container variants

195 ml 2 : 1 uTAH cartridge  
400 ml 2 : 1 tandem cartridge

# Bonding & sealing

## Plastic windows & doors



### Bonding of additional profiles

Bonding of additional sections, such as sill drips, drain bars, cleats and roller shutter bars, as well as cover caps and roller shutter guides in PVC profiles.



PVC adhesives	Basis	Open time [s]	Viscosity [mPa.s]	Colour	Temperature and UV-resistance	Adhesive joint
COSMO® SL-660.120	Containing THF	60	4000	white	Good	Tough-hard
COSMO® SL-660.130	Containing THF	60	4000	colourless	Good	Tough-hard
COSMO® SL-660.210	Reduced THF	60	4000	colourless	Good	Semi-hard
COSMO® SL-660.220	Reduced THF	60	4000	white	Good	Semi-hard
COSMO® SL-660.190	Free from THF (H351 no marking required)	120	2500	colourless	Good	Tough-hard
COSMO® SL-660.250	Free from THF (H351 no marking required)	120	2500	white	Good	Tough-hard



### Joint bridging bonding and sealing

Bonding and sealing of additional profiles.

### Assembly adhesive COSMO® SL-660.150

#### Special Properties

- Gap filling for joint width up to 7mm
- High initial adhesion
- UV- and weather-proof



### Bonding of film-laminated profiles

Bonding of end strips on film-laminated profiles as well as roller shutter guides and end caps.

### Fast-setting adhesive COSMO® CA-500.130

#### Special Properties

- Solvent-free
- Very high strengths
- UV- and weather-proof
- Re-closable dosing cap





# Clean

## Plastic windows & doors



### Solvating cleaner

<b>Cleaning agent</b>	<b>COSMO® CL-300.110</b>	<b>COSMO® CL-300.120</b>
<b>Designation</b>	<b>PVC smoothing agent</b>	<b>PVC cleaning agent</b>
<b>Application</b>	For the removal of scratches in PVC hard-white surfaces	<ul style="list-style-type: none"> <li>• For PVC hard-white</li> <li>• Cleaning of diverse non-transparent plastic materials</li> </ul>
<b>Special Properties</b>	Strongly dissolving	Slightly dissolving



### Non-solvating cleaning agents

<b>Cleaning agent</b>	<b>COSMO® CL-300.140 SPECIAL</b>	<b>COSMO® CL-300.150</b>
<b>Designation</b>	<b>Plastics cleaner</b>	<b>Special cleaner</b>
<b>Application</b>	For plastic materials (e.g. PVC, PMMA, PC, SAN and film-laminated profiles)	<ul style="list-style-type: none"> <li>• PVC hard white and film-laminated profiles</li> <li>• Removing fresh adhesive residues, dust, grease pencil, rubber residues, spots of tar and bitumen</li> </ul>
<b>Special Properties</b>	With antistatic agent	<ul style="list-style-type: none"> <li>• Without antistatic agent</li> <li>• For preparation of bonding</li> </ul>

# Bonding

## Wooden windows & doors

### Bonding of dressed timbers of windows and mortise tenon joints

Bonding of different soft, hard and exotic wood types



Adhesives	Basis	Bonding	Open time +20 °C [min]	Pressing time +20 °C [min]	Adhesive joint	Colour	Application
COSMO® PU-160.110	Polyurethane	D4 *	35	90	Tough-hard	brown	Dressed timbers
COSMO® PU-170.110	Polyurethane	D4 *	40	90	Tough-elastic	opaque	Dressed timbers
COSMO® PU-100.110	Polyurethane	D4 *	5	15	Tough-elastic	beige	Mortise tenon
COSMO® PU-100.250	Polyurethane	D4 *	3	10	Tough-hard	beige	Mortise tenon
COSMO® PU-180.150	Polyurethane	D4 *	10	30	Semi-hard	opaque	Mortise tenon
COSMO® PU-190.110	Polyurethane	D4 *	7	20	Semi-hard	opaque	Mortise tenon

\* D3-/D4 dispersion adhesives as per DIN EN 204 and test method WATT 91

# Bonding of EPDM seals & connection bonding

## General tasks concerning windows & doors



### Bonding of EPDM seals

Window, façade and door elements are mainly equipped with profile seals made of EPDM. The corners and joints of EPDM window seals are bonded with many systems. An immediate bonding is desired here.

#### CA fast-setting adhesive **COSMO® CA-500.110**

Very fast curing adhesive for the EPDM adhesives in window construction.

##### Special Properties

- Short fixing times
- Long storage stability
- Re-closable dosing cap



#### Adhesive sealant **COSMO® HD-100.410**

Particularly suitable if an elastic bonding joint is required for EPDM joints.

##### Special Properties

- Elastic adhesive joint
- Joint-filling



### RAL assembly / connection bonding

#### Bonding of joint tapes on window and door jambs

Bonding and sealing of fleece-laminated joint filler tapes for window and door assembly.

#### Adhesive sealant for assembly works **COSMO® HD-100.510**

##### 1-C-STP reaction mass

With outstanding adhesive properties on the different types of building materials & joint tapes.

##### Special Property

- Permanently elastic after curing



#### Adhesive sealant for assembly works **COSMO® DS-470.900**

##### 1-C dispersion mass

##### Special Properties

- Contains 47 % bio-based carbon content
- EMICODE class EC1<sup>PLUS</sup>

47% bio-based



# Pre-treatment, bonding or frames & repair

## General tasks concerning windows & doors



### Pre-treatment for self-adhesive joint tapes

Adhesion promotion for self-adhesive joint tapes on different types of absorbent mineral substrates such as, cement and gypsum fibre board, concrete, stone, brick and lime sand brick masonry.

#### 1-C dispersion primer **COSMO® SP-830.180**

##### Special Property

- Permanently tacky after curing



### Bonding of wing-concealing front doors on frame profiles

The optimum adhesive and the precise method depend on the door system, the design requirements as well as the materials to be bonded.

For these applications, Weiss is offering the 2C-STP construction adhesives **COSMO® HD-200.101** and **COSMO® HD-200.121** as product solution with system primer **COSMO® CL-310.110**.

- Fast and controlled full hardening
- Compensates the expansion of different materials
- Good weather resistance outdoors



### Window repair

Repair of cracks, wrong bores and other damage.

#### PVC repair agent **COSMO® SP-710.110**

##### Special Properties

- Easy, safe and fast handling for the processing
- Hard, impact resistant adhesive joint



### Profile forming

Reshaping and bending of thermoplastic plastic profiles

#### Bending fluid **COSMO® SP-780.110**

##### Special Properties

- Odourless
- Biologically degradable



# Accessories & care

## General tasks concerning windows & doors

### Compressed air & manual pressure guns

#### COSMO® SP-750 & SP-760

For dosing of COSMO®-tandem cartridges e.g.:



### Static mixing tubes

#### COSMO® SP-800

Static mixing tubes for homogeneous mixing of 2-C adhesives for the use of tandem cartridges.

- Homogeneous mixing achieves a constant adhesive quality
- Easy handling of tandem cartridges with static mixer



### Cleaning & care of windows & doors

#### COSMO® CL Service Set

Practical sets for cleaning, care, protection and maintenance of windows and doors, roller shutters, sealings and mechanical systems.

#### Set contents for white profiles and decorative profiles

- Cleaning milk with abrasive contents for white profiles or special colour cleaning agent for decorative profiles
- Sealing care
- Fitting oil
- Cleaning rag



Also available as private labels!

### Window clean

Eminently suitable for the care of all high-gloss finished surfaces like window glass, mirrors, chromium, etc.

#### Properties

- Striation-free cleaning
- Dries forming a transparent layer



### Multi Cloth

Universally applicable cleaning towels for the industry.

#### Properties

Strongly wear-resistant, absolutely lint-free cloth made of fleece with cleaning substances in a closable dispensing bucket.



### Special cleaner

#### for fly screens & mosquito nets

Removes pollen dust, fly speck and house dust from fly screens, mosquito nets and pollen protection grating made of nylon or metal.

#### Properties

- Highly effective
- Low foaming
- CLP conform and no marking required
- In a practical set: Spray bottle and cloth



### PUDOL

**PUDOL** belongs to the Weiss company group and stands for convincing quality of special products in the field of commercial cleaning. Please find further information on Pudol on page 15.

# Our service and advisory performances

Weiss, your competent and strong partner

## We strongly support you!

Weiss is representing top performance in the areas of **adhesive and sandwich element technology**.

For many decades, Weiss has been very successful in setting new market standards in terms of quality and excellent service. With our comprehensive product line of adhesives and sandwich panels, we are covering a wide variety of different applications.

**Expert advice and service** are counted to the elementary core competencies of our company. For all technical questions referring the application of our products the competent consultants of our Service Center will be available for you with their specialist knowledge.



**Contact data:**

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[www.weiss-chemie.de](http://www.weiss-chemie.de)

## Our service and advisory performances



Support with creating the requirements specification



Expert advice on product selection



Optimisation tips for the design of the bonding surfaces



Rationalisation proposals for work flows



Recommendation of suitable application devices as well as application and pressing technology



Optimisation of workstations with processing of adhesives and sandwich elements



Expert advice on all questions referring dangerous substances and goods.



Creation and modification of adhesives and composite panels in our Research and Development department.

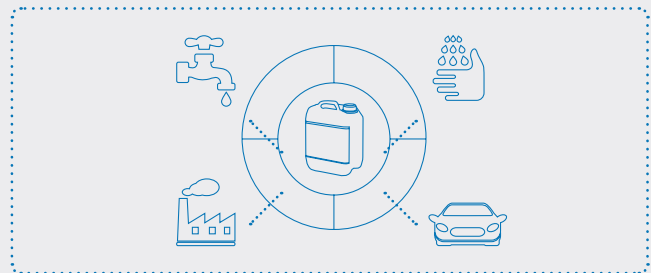
# Pudol – Cleaning and care agent

*Cleanliness refreshes your senses*

**PUDOL** stands for convincing quality of special products in the field of commercial cleaning. In addition to a complete range of cleaning and care products for different applications, we are offering a comprehensive service with interesting solutions and benefits.



## Our products and application fields



### Product groups

- **PUDOL SOFT**  
for sensible materials
- **PUDOL CARE**  
for high-gloss hygiene
- **PUDOL POWER**  
for extreme soiling
- **PUDOL FRESH**  
for cleanliness and fresh air

### Cleaning program

- Universal / multi-purpose cleaning agent
- Industrial cleaning agent
- Carpet cleaning agent
- Fresh cleaning agent
- Special cleaner
- Disinfection cleaning agent
- Floor cleaning agent
- Basic cleaning agent
- Wipe cleaning products
- Main care products

### Fields of application

- Universal
- Flooring
- Sanitary installations
- Clothing care
- Foodstuff industry
- Household and gastronomy
- Special
- Windows & glass
- Dishwasher
- Carpet & upholstery
- Industry & workshop
- Skin cleaning & protection
- Cars

Pudol Chemie GmbH & Co. KG / Bahnhofstr. 2 / D-57520 Niederdreisbach



# An overview of our range of products

Experience quality on a whole new level, with the powerful products by Weiss:



## **COSMO® Adhesives**

*Durably firm joints*

**COSMO® CA** (Cyanoacrylates)  
**COSMO® PU** (Polyurethane adhesives)  
**COSMO® CL** (Cleaning agents)  
**COSMO® SL** (Dispersion adhesives)  
**COSMO® HD** (Hybrid adhesives)  
**COSMO® EP** (Epoxy-resin adhesives)  
**COSMO® DS** (Dispersion adhesives)  
**COSMO® SP** (Service products)

### **Fields of application**

- + Windows and doors
- + Transportation / Marine engineering
- + Industry
- + Assembly
- + Dry construction
- + Airtight bonding
- + Wood / Furniture industry
- + Container construction
- + Composite panels
- + Fire protection
- + Advertising industry

### **Do you have any questions?**

**Our Service Center**  
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## **COSMO® Composite panels**

*Unlimited possibilities for design*

**COSMO® Therm** (heat-insulating)  
**COSMO® Silent** (sound insulating)  
**COSMO® Protect** (penetration resistant)  
**COSMO® Design** (grooved)  
**COSMO® Tech** (individual)  
**COSMO® Frame** (frame widening)

### **Fields of application**

- + Window and façade
- + Door construction
- + Industry
- + Automotive manufacturing
- + Trailer construction
- + Partition panel construction
- + Gate construction
- + Container construction
- + Energy conservation
- + Fire protection
- + Burglar resistance
- + Sound proofing

### **Do you have any questions?**

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## **PUDOL Cleaning and care agent**

*Cleanliness refreshes your senses*

**PUDOL SOFT**  
Mild cleaning agent for sensitive materials  
**PUDOL CARE**  
Maintenance product for high gloss and hygiene  
**PUDOL POWER**  
Powerful cleaning agent for extreme pollution  
**PUDOL FRESH**  
Cleaning agent for cleanliness and fresh air

### **Fields of application**

- + Flooring
- + Sanitary installations
- + Clothing care
- + Foodstuff industry
- + Household and gastronomy
- + Windows and glass
- + Dishwasher
- + Carpet and upholstery
- + Industry and workshop
- + Cars
- + Skin cleaning
- + Skin protection

### **Do you have any questions?**

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*Cleanliness refreshes your senses*

*made by weiss*