



Liquid Glass Coatings

Clean. Protect. Sanitize.

marine

food

facilities

med

auto

aviation

industrial



10 YEARS
High Quality - Made in Germany



Liquid Glass is an exceptional, truly remarkable, multi award winning technology which allows the end user to protect both industrial and domestic surfaces with ultra-thin super durable coating of invisible, easy to clean, glass.

In essence the technology allows the end user to deposit a nano scale layer of molecular, particle free glass (500 times thinner than a human hair), onto the surface of most items. The molecules of glass (silicon dioxide/SiO²) come from pure quartz sand, of which there are vast reserves, as silicon dioxide is one of the most abundant compounds on the planet. Just like domestic glass the coatings are chemically inert and highly resistant to commonly used cleaning chemicals. The coatings also offer resistance to alkalis, acids and solvents; however, despite some similarities to standard glass the Liquid Glass coatings are stunningly different. The layer is flexible, breathable, highly durable, heat tolerant, anti-microbial and offers non-stick and "easy clean" characteristics. The application of the Liquid Glass range of products is amazingly straight forward. After preparatory cleaning, items such as wash basins, windscreens, and fabrics can be coated in a matter of seconds. Significantly most coated surfaces can be cleaned with water alone, this of course massively reduces the use of environmentally damaging cleaning products.

The owners of CCM have been involved with the development and marketing of Liquid Glass technology since 1999 and as a result we offer unrivalled experience in the supply, packaging and worldwide distribution of this technology. We are currently support projects in over 60 countries.

Liquid Glass technology - the story so far!

It all started in Paris in 1845, when J.J. Ebelmen, a French scientist first discovered the Sol Gel process. In simple terms, he discovered that by manipulating a liquid which contained silica he could create glass. This was a very interesting theoretical discovery but at this time all that he was left with was small lumps of glass which were of no specific use. The next major step came in 1939 when the Schott Glaswerke company of Germany started to re-examine the technology. After a further 20 years of research they started to produce the first items coated with * SiO²; however the processes were still complex and expensive. Evidently continued R+D was called for! Whilst the world was focussing on the space race, the computer revolution and the genome projects, the scientific community in Germany was creating "Liquid Glass Technology" which could be applied on a DIY ba-

sis. The target being, to produce an undetectable coating, which could protect and enhance almost any surface. At the start of the millennium such coatings became available for the first time and we are proud to say that we were involved in their launch to a wide range of markets.



A.L.G.T. (Advanced Liquid Glass Technology). It has now been over 150 years since the discovery of the Sol Gel process and advances are continually being made. We are now able to bring you the 3rd Generation of Liquid Glass Technology via which we offer more efficient coatings, at reduced cost to the consumer. We also develop new technologies and technical coatings which are in the micron scale. These are used in a wide range of demanding environments, such as the marine, auto and aviation sectors. In essence A.L.G.T. is the culmination of 150 years of development. Where will be in another 150 years? Obviously we do not know the answer to this question... but we do know that we offer state of the art technology for the world of today.

*Silica (silicon dioxide or SiO²) is one of the most common chemical compounds.

Our product sectors

The following areas of application represent the main divisions within our organisation. The simple message is, "we can protect almost everything".

SiO², ultra thin coating technology has been described as "one of the world's most versatile technologies"; and when you consider that it is easy to apply, heat tolerant, flexible, breathable, highly durable, environmentally friendly, chemically inert, food safe, low cost and anti-bacterial, you can see why this comment has been made. SiO² has been used as a food additive for many years.

food

It is commonly used in products such as toothpaste, ketchup, and beer; however we now find that its greatest value to the food industry is when it is used as a surface coating. Surfaces which are coated with SiO² offer anti-sticking, easy clean, stain proofing and biostatic characteristics. SiO² coatings have already been evaluated by leading food manufacturers. As SiO² is inherently food safe and inert, it provides the ideal coating for food production plants, butchery departments, storage vessels, kitchen implements and food handling surfaces.

industrial

We are contacted on a daily basis by companies wishing to know if an SiO² coating will be suitable for application to their product or general working environment. In essence our coatings can be applied to almost any surface, and in most instances we have an "off the shelf" solution to most requests; from

Our product sectors

Abattoirs to Zoological specimen protection, we can offer a coating. It should be stressed that not all of our coatings are at the nano scale. Some of our coatings are in the 10 micron range. A nano scale coating is ideal if you wish to coat optical lenses but if you wish to coat flooring in a supermarket then a thicker coating may be more suitable. In all instances our self application coatings are low cost and very easy to work with.

med

SiO₂ coatings have been tested extensively in the UK medical sector and Neil McClelland, our Technical Director, has been responsible for promoting the use of SiO₂ coatings within the UK's National Health Service. He has presented extensively in the UK and was a guest speaker at the world famous IOM3 (Institute of Materials, Minerals and Mining). Testing has conclusively proven that SiO₂ coatings are of enormous significance to the health sector. In simple terms the coatings can be used to create environments in which the bio burden is massively reduced and coated surfaces are exceptionally easy to clean. SiO₂ coatings and our anti-pathogen technologies can be used on almost all surfaces within the Health-care sector, this includes clothing, stethoscopes, surgical instruments, walls, floors, operating theatres, bedside tables, touch screens, mobile devices etc. There are literally hundreds of surfaces which can be coated within a hospital, dental surgery or similar environment.

facilities

We offer coatings for railway stations, hotels, schools, shopping centres, supermarkets, escalators, etc. Not only do we offer fantastic coatings for these facilities but we offer coatings for almost all of the surfaces within the facility. From anti-graffiti coatings on the outside to anti-bac coatings for ATMs on the inside. We also offer a complete range of stone protection coatings. These easy to apply, water based, topographical coatings, which are of course highly durable and breathable, are suitable for use on floors, monuments, work surfaces and of course interior and exterior walls. They are available in coatings which range from 50 nm to approximately 10 microns. Much depends on what you wish to protect and how you need to protect it. Our graffiti protection coatings can offer protection for up to 50 removal cycles.

auto

SiO₂ coatings are ideal for protecting cars and motorcycles. Alloy wheels become easy to clean and blemish free, as brake dust does not burn into the coating. Exterior body work and fuel tanks become protected by a glossy, easy to clean and abrasion resistant coating. Car seats become stain resistant and odours can be significantly reduced, especially if an anti-pathogen variant is used. Perhaps most significantly all of the windows can be coated with a highly durable and undetectable super-phobic coating which massively increases visibility when driving in heavy rain.

aviation

SiO₂ coatings have already been trialed extensively on private Business Jets. On interior surfaces the coatings have been used to protect carpets and fabrics against staining and wear, on galley surfaces to enhance the appearance and "cleanability". (Coated surfaces maintain an "as good as new" appearance). Our anti-pathogen coatings will of course allow the client to travel in an environment which is as clean as possible. On the exterior of the aircraft, SiO₂ coatings have been proven to be significantly more durable than the conventional coatings which are currently in use. We are now working through CAA approvals.

marine

SiO₂ coatings have been tested on a wide range of vessels. The marine environment is of course very tough and our coatings have proven to offer excellent performance, and as ever the range of possible applications have proven to be enormous. On cruise liners expensive state room carpets can be protected as can all surfaces in kitchens restaurants, and bathrooms. Linen, bedding and soft furnishing become stain resistant. Bridge windows remain clearer in stormy conditions as sea salt does not burn into coated glass. Funnels do not become stained by exhaust deposits and so high standards of presentation are maintained. On pleasure craft, hulls can be protected against soiling and abrasion, soft furnishings can be protected against mould, galleys and heads can be coated with anti-pathogen protection.

We also provide a complete cleaning, protection and sanitation program which utilises, award winning cleaning technologies.

Liquid Glass – Protecting our world.



think green



Multiple Green Apple Award Winners

Pre-Cleaner BIOSATIVA® Steam Cleaner in a bottle



BIOSATIVA® – completely bio-degradable

- PATENTED INGREDIENTS - MADE IN GERMANY
- 100% bio-degradable
- Made from Natural Resources
- Skin Friendly (also suitable for allergics), NON TOXIC to animals and plant life
- Winner of the prestigious Europe+UK Green Apple Award, presented by The Green Organisation of the UK.

What is BIOSATIVA® and how does it work ?

BIOSATIVA® is a bioactive, water-soluble Cleaning Agent, that solubilises staining generated by fats and oils and thus ensures their complete biodegradation.

BIOSATIVA® includes innovative surfactants which possess enormous cleaning power. Moreover BIOSATIVA®...

- is neither water-polluting nor harmful to animals and plants
- does not harm any organisms
- non-corrosive to paints, plastics or other materials
- skin friendly
- totally bio-degrades within a few days and is non-toxic for the environment, humans and animals
- contains ingredients from controlled ecological farming

BIOSATIVA® can be used

- for large scale Kitchens, Takeaways, Bakeries, Catering, Hotels, Washrooms and similar environments.
- for Industry, Garages, Machinery, Repair Shops, Production lines and Workshops, Petrol Stations, Tank Cleaning etc.
- for environmental use, cleaning of building yards, rail stations, airports and roads, farm yards, etc
- for odour control, especially neutralising oil taint.
- for water management and waste water treatment plants
- for soil remediation, agricultural soils

Declaration of marketability and Safety Data Sheets issued by the SGS Fresenius lab.

What is a surfactant?

A surfactant, (i.e. a surface-active medium) is a substance, that, when solubilised in water, enables the product to remove staining from surfaces eg. machines, floors, walls, human skin, textiles, and other solids.

How do surfactants work ?

Influence on the surface tension

Surfactants lower the surface tension of a medium in which they are dissolved

Wetting

Wetting is the capability of liquids to spread on (solid) surfaces. Lower surface tension = better wetting. Therefore a drop of surfactant spreads more easily on a surface than a drop of water, because the hydrophobic end of the surfactant molecules create the contact between the substrate and water and at the same time the hydro-

philic heads are reaching into the water, thus creating strong intermolecular forces.

Dispersion

Dispersion occurs because of

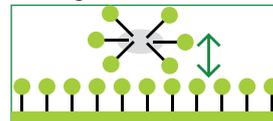
- Lowered Surface Tension
- Surface-Activity
- hydrophilic / hydrophobic (amphiphilic) Body, during cleaning the BIOSATIVA®-surfactants are showing
- Wetting Ability
- Stain loosening characteristics
- Dispersive characteristics



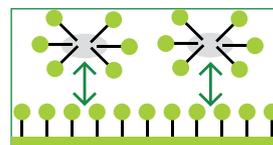
Surfactant anion action cleans surfaces and staining (picture a) The surfactant anions act as a link between hydrophilic water and hydrophobic surfaces and staining agents (surface-activity of the surfactants)



Reduction of dirt retention (picture b) The negatively charged surfactant-anions repel each other, thus staining is loosened and emulsified.



Staining destabilisation (picture c) Whilst the negative charged surfactant-anions repel each other "micelles" are being generated (Staining is being surrounded by surfactant molecules) Agitation maintains dispersion.



Continued molecular interaction enhances dispersion of staining agents and allows for cleaning of the surface.

Canteen kitchens, Take-aways, Bakeries, Catering, Hotels, Agro facilities, Washroom and Sanitary Environments

Keep work surfaces and drainage pipes free from grease. The usage of BIOSATIVA® prevents drains and filters becoming blocked by grease or fat residues. It can also be used to clean grease-soiled ovens or baking trays and floors contaminated with grease or fat. Extraction hoods and their filters and numerous similar items can also be cleaned with BIOSATIVA®.

Regular use of BIOSATIVA® prevents the formation of grease residues. BIOSATIVA® helps to keep your large scale kitchen premises clean.

Pre-Cleaner BIOSATIVA® Steam Cleaner in a bottle



BIOSATIVA® is non-combustible and entirely biodegradable, without any harmful impact on the environment. (The liquid is of course free of any chlorine) After application of BIOSATIVA®, the greasy layer is removed and all residual water can be rinsed away into the drainage system where it will continue to act as a dispersive agent.

Workshops, industry and manufacturing facilities

Degrease components, clean machines, workplaces, floors, engines. BIOSATIVA® is ideal for degreasing tasks in the metal industry. It removes most kinds of fats and oils be they synthetic, mineral, animal or vegetable. BIOSATIVA® is suitable for the removal of carbon black, for cleaning machine parts, engine blocks, work places, containers, concrete floors, and can be used in soak cleaning stations or as a cooling fluid. Significantly BIOSATIVA® neutralises unpleasant odours, such as smells from diesel or fuel oil. BIOSATIVA® may be drained into the public sewage system. Small-parts and complex items can be cleaned with BIOSATIVA® in any receptacle.

Tank and Vessel cleaning

BIOSATIVA® is ideal for the removal of all sorts of animal, vegetable, mineral and synthetic oils and fatty substances in storage tanks and food production environments. It can be used in all cleaning systems, even under high pressure and temperature. (when heated, no hazardous materials are released.) BIOSATIVA® works rapidly, effectively, cost effectively, and does not cause any health risks.

Agriculture

Cleaning of company buildings, stables and machines. Environmental compatibility is of great importance in agriculture, therefore, the use of BIOSATIVA® in agriculture is highly recommended. Plants and animals that come into contact with BIOSATIVA® will not be harmed in any way. BIOSATIVA® is suitable for cleaning silos, stables, farmyards, machine halls and boxes. BIOSATIVA® is ideal for cleaning agricultural machines, engines, etc. and can be used in association with high-pressure water cleaners.

Railroad tracks and railway stations

Keep tracks free from oil, clean rail vehicles and railway lines. Any contaminations within the track area, and oily soil on railway stations or the rails can be removed in an efficient and environmentally friendly way by using BIOSATIVA®. There are of course no concerns about the environmental impact of the technology. BIOSATIVA® complies to all the requirements of the German Railway "Deutsche Bahn". It is not corrosive to plastic, paint coatings or any other surface.

Environmental use, cleaning of haulage, garages, and roads

When removing oil or diesel spills from roads and pathways it is essential to use cleaning agents that meet strict environmental guidelines. BIOSATIVA® meets the strict German Federal Environment Office (Umweltbundesamt UBA) guidelines. BIOSATIVA® complies with the respective requirements in its entirety. BIOSATIVA® is not corrosive to the road surface or other surfaces and coatings and is characterized by its exceptionally high environmental compatibility. BIOSATIVA® is well suited for cleaning tasks at public markets, festival fairgrounds, fish markets, etc. Significantly the technology impedes the adhesion of contaminants to drainage systems.

Odour management

Rooms contaminated by oil or fuel oil, e.g. boiler rooms, etc., usually have a very unpleasant oily smell. Cleaning with BIOSATIVA® and treatment with BIOSATIVA®, neutralises such odours completely.

Yeast

Without yeast we would not have wine, bread, or BIOSATIVA®! Yeast is one of the most important components of this stunning technology. The other ingredients are: Betaine, Natriumcarbonate, Natrium-citrat, Natriumtripolyphosphat.

Shelf life

concentrate, unopened bottle: unlimited
(after opening 18 month)
diluted liquid: 4 weeks

BS2122-10 **10 litres canister**
BS2122-1000 **1000 litres IBC container**

Examples of mixing ratios

Boat Cleaning	1:20	Floor cleaning with cleaning machine	1:40	Pan cleaning	1:10
Car steam jet cleaning for engine compartments	1:30	Flooring (non absorbant)	1:10	Petrol pumps and surrounding equipment	1:10
Concrete, stain removal	1:6	Glass cleaning	1:60	Plastic cleaning	1:10
Dishes and cutlery cleaning	1:20	Machine cleaning	1:10	Pressure water dispensing	1:60
Engine cleaning	1:10	Metal and stainless steel cleaning	1:10	Windows	1:100
Floor cleaning (manual cleaning with sponge or cloths)	1:20	Oven cleaning	1:10	Work Benches	1:10



Pre-Cleaner BLU1000

High Quality Stainless Steel Cleaner

Product characteristics

This product contains highly active cleaning agents and additives to thoroughly clean very contaminated, damaged, corroded or unsightly stainless steel surfaces. Cleaned surfaces often look as good as new, and sometimes better than new.

Utilization

Interior and exterior surfaces of stainless steel, coatings (metallic, organic or inorganic) in industry, craft, food production and preparation, private and public sector (e.g. swimming baths, hospitals) and in the home.

Stainless Steel Special Cleaner BLU1000

It is used as a special cleaner in highly soiled, coated or corroded vessels within breweries. Ideal for stairways, handrails, railings, swimming baths, steel cladding, furniture etc..

BLU1000 can be used on other substrates but it is optimised for stainless steel. Use on other substrates is at the users discretion

Application

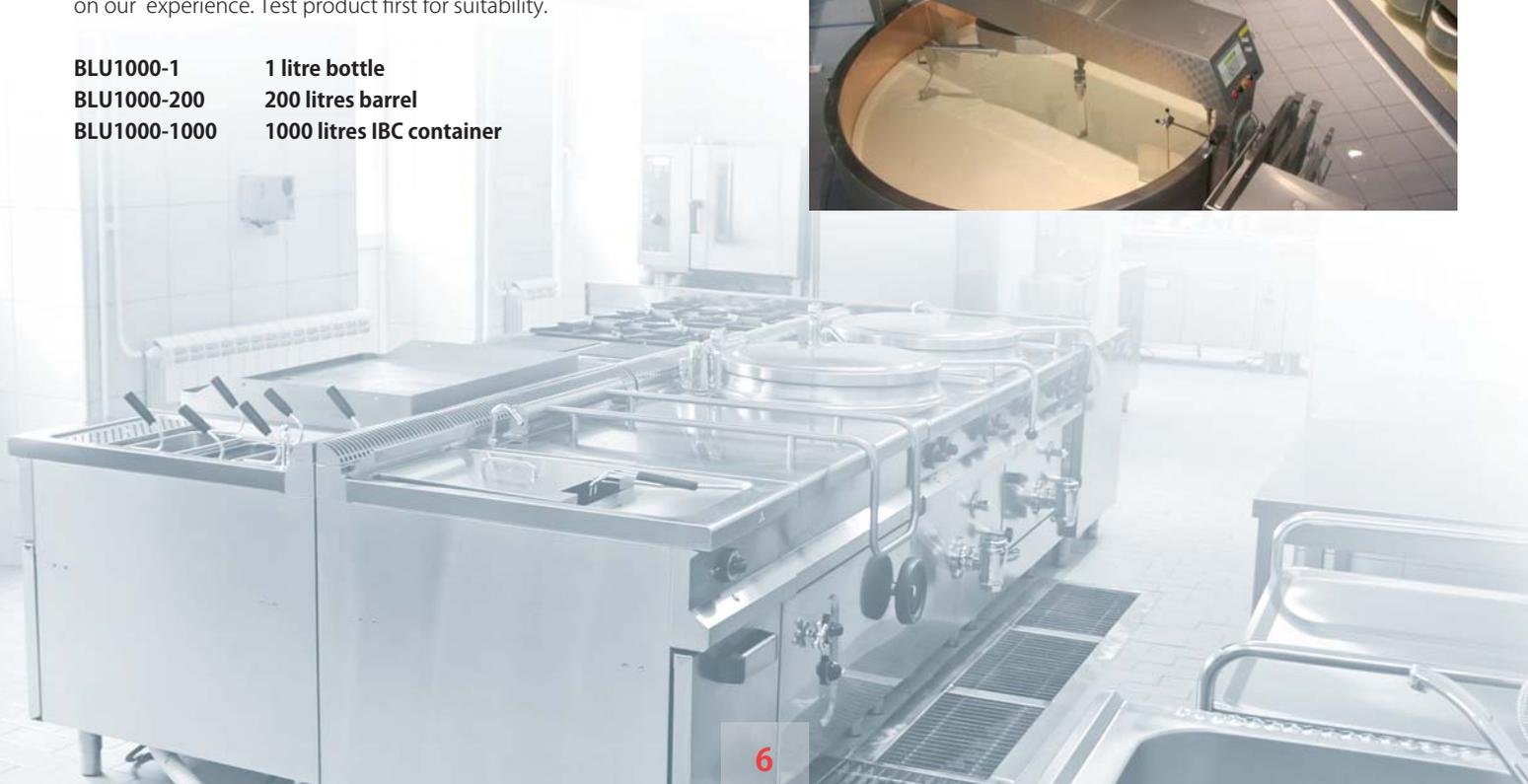
The product is applied with a special sponge and worked into the surface. The time required for application depends on the degree of contamination and surface condition. Ensure that stubborn stains are thoroughly treated with the special polishing pad or sponge. This will not affect the surface structure. After application remove any remaining residues by rinsing with water and then wiping dry.

Consumption

1 litre = 5-10 m²

The indication of product suitability and associated notes are based on our experience. Test product first for suitability.

BLU1000-1	1 litre bottle
BLU1000-200	200 litres barrel
BLU1000-1000	1000 litres IBC container



7675 Duo Glass-Metal / 7678 (Concentrate) & 673 Universal NA

Universal Coatings for non-absorbent surfaces (Glass / Ceramics, Plastics, Metal & Stainless Steel)

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature
+5°C - +50°C	200-250m ² (depending on the structure of the substrate)	Up to 2 years, depending on abrasion rates	12-18 months	+5°C - +25°C

Universal coatings are coatings which offer the same “very good” performance characteristics on every substrate. But for the highest level of performance we suggest the use of our „substrate specific” coatings. The universal coatings are perfect for consumers, easy to apply and very effective.

Properties

- can be used on almost all non-absorbent surfaces
- easy to apply
- easy to clean
- biostatic
- treated surfaces remain clean for prolonged periods
- adhesion of dirt and deposits is massively reduced
- soiling is easily removed with water
- water and other liquids pearl off easily
- ideal for bathrooms, healthcare environments and public buildings
- food safe, tested after EC legislation regulation 10/2011
- colourless

Which coating for which use?		
Application	7675 SiO ² based	673 Silane-based
Glass / Ceramics	+++	++
Plastics	++	+++
Metal	++	++
Stainless Steel	+++	++
Painted surfaces / car paintings	+ (cannot be layered)	+++ (can be layered)
Optimum performance after...	24 hours	10 hours
Shelf life of the liquid	12-18 months	12-18 months
Attributes (R2U)	7675	673
alcohol-based	yes	yes
Application	easy	very easy
odour	nearly odour-free	slight
touch dry	2-3 minutes	2-3 minutes
surface usable after	one hour	20 minutes
	24 hours	10 hours
	12-18 months	12-18 months

Art. No.	7675/7678	673
Art. No. Ready-to-use	7675-1 1.000ml bottle 7675-200 200 litre barrel 7675-1000 – 1.000 litres IBC container Customs code: 3208 9091, DG (VOC 99%)	673-1 1.000ml bottle 673-200 200 litre barrel 673-1000 – 1.000 litres IBC container Customs code: 3208 9019, DG
Art. No. Concentrate	Dilution Rate: 1:120 7678-1 1.000ml bottle (1:120) 7678-200 200 litre barrel 7678-1000 – 1.000 litres IBC container needed alcohol: Isopropanol 100%; water content < 0,1 wt% Customs codes: 3208 9091 + 2811 1980 (2 components)	not available

Some of the testing associated with these coatings:	
TÜV, MSZ ISO 18593:2008	Microbiological Test
TÜV, MSZ 9640/41:1983	Scratch hardness test with spring ball rod
TÜV, MSZ EN ISO 15184:2013	Pencil Hardness Test
TÜV, Sessile drop method	Water-Repellent, surface tension, contact angles
TÜV, DIN 51 155	Impact Test
TÜV, ICP-MS MSZ EN ISO 17294-2:2005	Metal content of the wipes
TÜV, ICP-MS + XRF	RoHs screening test
ASTM D 3363	Wolf Wilburn Pencil Hardness Test
DIN EN ISO 15184	
BS 3900-E19	
DIN EX 13523-4	
ISO 10993-1	Biocompatibility Test
ASTM E 2180-07 (Reapproved 2012)	Assessment of Antimicrobial activity (ATCC 6538, 4352 & 15442)
ISO 9001	Anti-Bacterial Test
Martens, Vickers	Hardness Test on Mobile Phone Screens
	Radiation Test on mobile phone

695 Universal STW / 697 (Concentrate) & 691 Universal Duo Textile-Stone / 692 (Concentrate)

Universal Coatings for absorbent surfaces (Stone, Textile & Wood)

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature
+5°C - +50°C	5-40m ² (depending on the structure of the substrate)	up to 2 years	up to 24 months, depending on the variant	+5°C - +25°C

Universal coatings are „easy to apply“ coatings which offer the same “very good” performance characteristics on every substrate. But for the highest level of performance we suggest the use of our „substrate specific“ coatings. The universal coatings are perfect for consumers, as they are DIY variants and highly effective.

Properties

- aqueous, room temperature curing impregnation for textiles (PES, Cotton, PA and mixtures), stone & wood
- exceptionally versatile, no odour.
- can be applied to almost all absorbent surfaces
- excellent performance
- hydrophobic and oleophobic
- generates a nano scale film on the surface of the fabric fibres and filaments.
- reduces significantly the penetration of water, soot, coffee, cola, ketchup, red wine and other staining agents into the fibres.
- the penetration of cooking fat, fuel, waste oil and dry soiling agents into the structure of the fibre is reduced and as a result many soiling agents can be easily removed
- Includes organo functionalized silanes
- water based
- optimized for highly absorbent mineral surfaces
- reduces adhesion of micro-organisms
- excellent acid and alkaline resistance (approximately 2-12ph in diluted form)
- coverage rate per litre: 4-40m² (depending on the structure of the substrate), heavy carpets requires the application of more liquid than fine silk in order to effect a coating
- durability of the coating: Up to 2 years in normal use eg. domestic carpet with high footfall
- offers contact protection for leather and fabrics. Soiling agents should be removed within 2-3 minutes to prevent staining.
- breathable (not suitable for protecting marble against acidic vapour!)
- nano particle free
- no DG / VOC free

Which coating for which use?

Application	691/692	695/697
Stone	++	+++
Wood	+	+++
Textile	+++	++

Attributes

Attributes	691/692	695/697
water-based	yes	yes
Application	very easy	very easy
room curing	12 to 24 hours	12 hours
fluorinated agent content	fluorine C-6, PFOA free	PFOA and PFC free
shelf life of the liquid	12 months	24 months
Concentrate	1:20-1:30	1:9 (for stone) - 1:14 (for textile)
Note		Don't use on white, low quality textiles

Art No.	691/692	695/697
Art. No. Ready-to-use	691-1 1.000ml bottle 691-200 200 litre barrel 691-1000 1.000 litres IBC	695-1 1.000ml bottle 695-200 200 litre barrel 695-1000 1.000 litres IBC
	Customs code: 3809 9100, no DG	Customs code: 3910 0000, no DG
Art. No. Concentrate	692-1 1.000ml bottle 692-200 200 litre barrel 692-1000 1.000 litres IBC	697-1 1.000ml bottle 697-200 200 litre barrel 697-1000 1.000 litres IBC
	Customs code: 3809 9100, no DG	Customs code: 3910 0000, no DG



689 Rapid Tex, 7689 Dura Tex / 7685 (Concentrate), 680 Commercial Tex (Concentrate) & 7625 Leather Proof Textile, Leather & Paper Coatings

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature
+5°C - +50°C	up to 100m ² , depends on the density/structure of the substrate	up to 25 hand washing cycles (Heat cured industrial coating offers the highest level of washability)	24 months	+5°C - +25°C

We offer a wide range of water based textile, leather and paper coatings for slightly different uses. The coatings match the needs of those who seek DIY and industrial applications. The variants offered also range in performance levels, mixing ratios and drying times. All products are available as concentrates.

Properties

- water-based
- creates water, oil and stain resistant fabrics
- forms a long-lasting, transparent, ultra-thin layer
- high Hydrophobicity + Oleophobicity
- strong anti-adhesive properties
- excellent easy-to-clean effect with regard to dirt and liquids
- fibres are protected against the ingress of dirt particles
- food-safety
- permanent
- UV-stable
- temperature-resistant
- bacteriostatic, creates an environment which inhibits microbial development
- environmental compatibility
- easy application
- breathable
- will not affect the appearance, breathability, colour and texture of the fabric
- invisible to the human eye (coating thickness: 100-150 nm)
- no change to the hand / texture of the fabric
- simple application (do-it-yourself)
- resistant to domestic solvents and domestic acidic and alkaline cleaners
- highly flexible up to 200% stretch

Intended Purpose:

- Clothing
- Home textiles (upholstery, furniture, carpets)
- Suede / leather
- Paper, cardboard
- Household textiles (pillows, furniture), carpets
- Suede/leather
- Mobile Phone bags

Art. No. Ready-to-use			Customs Code
1.000ml bottle	200 litres barrel	1.000 litres IBC-Container	
689-1 (1:19 from 685)	689-200	689-1000	3824 9096, no DG
7689-1 (1:9 from 7685)	7689-00	7689-1000	3824 9096, no DG
7625-1	7625-200	7625-1000	3824 9070, no DG
Art. No. Concentrate			Customs Code
1.000ml bottle	200 litres barrel	1.000 litres IBC-Container	
7685-1 1:9-1:39	7685-200	7685-1000	3824 9096, no DG
680-1 1:9	680-200	680-1000	3809 9100, no DG

Comparison of the Coatings:

Application	7689 DuraTex	680 CommercialTex	689 RapidTex	7625 LeatherProof
Textile	+++	+++	+++	+
Leather	+	+	+	+++
Suede	++	++	++	++
Attributes (for ready-to-use liquid)				
water-based	yes	yes	yes	yes
Application	spray	to apply with heat (3 minutes at 100-130°C)	spray	spray
room curing	12 hrs	not possible	1-1.5 hrs	12 hrs
fluorine	yes, fluorine C-6, PFOA free	yes, fluorine C-6 PFOA free	yes, below the declarable amount of fluorine	yes, fluorocarbon C-6, PFOA and PFOS free
shelf life of the liquid	24 months	24 months	24 months	24 months

601 Domestic Glass / 608 (Concentrate) & 7601 Super Glass / 7608 (Concentrate)

Glass and Ceramic Coatings, recommended for all kinds of glass.

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature	Curing time
-25°C - +35°C, also in sunlight	150-200m ²	outside under German weather conditions 601: 1-3 years, 7601: 3-5 years	2 years	-10°C - +30°C	12 hours at 20°C (surface usable after one hour)

Properties

- clear, colourless liquid, virtually undetectable, surfaces look and feel the same after application but they may look slightly brighter.
- easy to apply and re apply
- Resistant against frost and extreme heat or UV exposure, to salt, hard water minerals, seawater, salty air, domestic acid and alkalisolutions eg. within the range ph 2-12
- anti-soiling, water and dirt-repellent
- helps to prevent water marks, dirt, algae and bird fouling from adhering to glass
- no scraping, scrubbing or harsh chemical cleaners needed as soiling agents do not bond to the coated surface
- protects windows from irreparable corrosion, abrasion and "salt burn in"
- easy to clean effect, treated surfaces remain clean for prolonged periods, this reduces cleaning time and the costs for cleaning and care
- drastically reduces cleaning frequencies, saving energy, time and cost
- self-cleaning glass effect on vertical surfaces after heavy rain.
- reduces the growth of micro-organisms and bacteria
- enhanced hygiene due to biostatic characteristics
- will considerably reduce surface friction
- long durability
- contact angle Appr. 104°
- Heat resistance: 450°C short-term (seconds), 250°C long-term (hours)
- ph-value stable:1-12,5

ALGT® glass & ceramic is ideal for use on glass and ceramic surfaces in environments such as

- buildings eg. glass facades/entrance doors
- float glass
- treatment of automotive glass (massively improves visibility in rainy conditions), durability: 601: up to 6 months, 7601: up to 12 months.
- treatment of solar/photo-voltaic plants (higher efficiency)
- anti-soiling coatings of ceramic and enamel
- conservatories
- sanitary ware (shower screens, splash-backs, mirrors, basins, toilet)
- glazed ceramic tiles
- ceramic bathtubs, showers, sinks, swimming pools
- windows, sliding doors, skylights, louvre windows balustrades kitchens
- Detergent resistance: ph value 1-12,5

Customs code: 3824 9092, DG

	601 DomesticGlass High Quality	7601 SuperGlass Premium Quality
1.000ml bottle	601-1	7601-1
200 litres barrel	601-200	7601-200
1.000 litres IBC container	601-1000	7601-1000

Some of the testing associated with these coatings:	
Test according to	Description
ISO 11507	Artificial weathering with fluorescent UV lamps + water (method A)
DIN 55620-1+2	Determination the contact angle
DIN EN ISO 11998:2008	Determination of the wet-scrub resistance and cleanability of coatings
TÜV	Test on windscreens: 1) Perl effect from 40 km/h 2) Easy--to-apply 3) streak-free
DIN 1249 part 12, DIN 18516, part 4, DIN EN 12150	Test Flexural Strength on Safety Glass
CCM lab	Contact angle

Concentrate for 20 litres:		
Component	608	7608
A	140g	400g
B	140g	400g
Purchased from local supplier:		
Ethanol (EtOH) 99% or higher	16.8 litres	19.3 litres
Hydrochloric acid 37% (HCl) CAS No.: 7647-01-0	40g	40g

640 Permanent Protect High Performance Coating. Aerospace Grade.

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature	Curing time
+5°C - +35°C	up to 150m ²	up to 25 years	24 months when stored in original containers, 6-12 months after opening	+5°C - +25°C	7 days at room temperature

This is a highly advanced SiO² coating which was created to address the needs of the marine, military and aerospace sectors. It is massively resistant to corrosion, abrasion and temperature. It can be applied to metal, plastic, powder coated and painted substrates. The coating can be heat cured, or cured at ambient temperature. ALGT® Permanent Protector reacts with the substrates surface and forms an abrasion resistant coating with very high bonding properties on metal. It generates thin, transparent coatings with high impact strength and is resistant to alkali, abrasion and corrosion.

Properties

- contains solvent (not water)
- clear, colourless liquid based on silanes
- ultra high performance, hardness of 7-9H
- high impact strength
- is ideally suited for the water/dirt-repellent coating of non-absorbent materials in outdoor and indoor areas
- can be sprayed or wiped on to surfaces
- generates a generally invisible surface. The coating does provide a glossy appearance
- extremely resistant to corrosion, abrasion, acids and alkali eg within the range ph 2-12 in diluted form, sea water and salty air (extensive Salt spray testing has been conducted. In addition testing shows that this coating is also resistance to rocket fuel!)
- highly resistant to a large number of organic solvents
- treated surfaces remain clean for prolonged periods and are "easy to clean"
- protected surfaces provide reduced costs for cleaning and care
- food safe
- heat resistant up to 700°C working temperature, 800°C peak
- cold resistant up to -90°C
- highly effective for up to 25 years
- Heat drying increases the hardness of the coating, which ranges from 7H (for room temperature curing) to 9H (for heat curing)
- contact angle: 105°
- VOC content: 59,9 %

ALGT® Corrosion Protection can be used on materials such as:

ferrous metals, non ferrous metals, galvanised metals, varnished surfaces, powder coated surfaces, plastic, e.g. window frames, anodized aluminium, painted surfaces and many more

ALGT® Corrosion Protection can be used in a vast variety of commercial applications:

- military industry (battle ships, airplanes, tanks, weapons etc.)
- steel industry (bridges, constructions, equipment, components, machines etc.)
- oil industry (pipe lines, platforms, coupling units etc.)
- Merchant and Leisure marine. On a vast number of surfaces above and below the waterline
- car industry (engines, paint top coat etc.), protection for at least 5 years
- train industry (engines, train frames, paint top coat, against graffiti etc.)
- aerospace (engines, paint top coat, leading edges etc.)

ALGT® Permanent Protector is also our recommendation for use on stainless steel – For extreme abrasion resistance

- 50ml bottle, art. no. 640-50
- 100ml bottle, art. no. 640-100
- 1.000ml bottle, art. no. 640-1
- 5.000ml bottle, art. no. 640-5



further information

Test according to	Description
DIN 10531	Migration test (metals)
EN 1186-4 + 5	Overall migration test
EN 13130	Specific migration test
Martens, Vickers	Hardness Test on Mobile Phone Screens

Application of Permanent Protector 9H Ceramics Coating for Automotive Surfaces

The **Auto and Aerospace 9H Ceramics Coating** can be applied to almost any (car) paints. To attain optimum performance it is essential that the target surface is to perfectly clean; it must be completely free from waxes, silicone coatings, etc., otherwise the coating will not be able to bond to the surface.

Before full application, please always carry out a test on an inconspicuous location (eg. in the engine compartment or the car). Do not apply the coating to freshly painted surfaces as the paint must completely cured before application.

Cleaning and surface preparation.

This product is a product for professionals, therefore it is recommended to practice the application to "get a feel" for the application process. In addition the polishing process should be practiced so that the desired level of gloss finish is attained.

First, meticulously pre-clean the car paint; for this you may use common cleaner, or our pre-cleaner BIOSATIVA®. After completion of the general cleaning process, deep clean the surface with alcohol (e.g. at least 70% isopropyl or ethanol alcohol, we supply these liquids if required) so that all contaminants are removed. The use of a clay bar cleaning process is also suitable. The simple message is that the coating should only be applied to surfaces which are free of contamination.

The better you perform the pre-cleaning, the better the adhesion and subsequent longevity of the coating.

The application process.

Please ensure that the application is performed in a well ventilated and dust-free area. We recommend that you use a protective mask during application as the liquid has a strong odour. Wearing protective gloves is also recommended. Please read the MSDS information.

The surface to be coated should be not too hot; so do not coat the car paint if the car was located directly under the sun before, otherwise the liquid will "flash off" and initial curing will be too rapid, and the polishing will be considerably more difficult. Ideally the process should be conducted at an ambient temperature of 25°C. (+/-5°C)

Plan your work. Apply the coating in small sections eg. one body panel at a time. We recommend that you work in a team, e.g. one person applies the finishing, and the other person polishes it promptly.

Step by step instructions

- 1 Prepare the surface as already described.
- 2 Use a thin and smooth microfiber cloth to apply the finish (a cloth of approximately 25 x 25cm is recommended). Completely moisten the cloth with **Auto and Aerospace 9H Ceramics Coating**. Apply the finish swiftly and evenly by wiping (always in one direction).
- 3 Next, (after 1-2 minutes) polish the coated surface, without excessive pressure, using a smooth cotton or microfiber cloth (ensure that a lint free fabric is used).
Do not wait longer than 2 minutes before this first buffing action. You must ensure not to aggressively remove too much of the finish. Ensure that all blemishes are removed. If for some reason you delayed the polishing process, and „high spots“ occur, immediately apply another layer of the finish; this will soften the layer below, and you may polish anew.
Finish the buffing with a fine soft peach skin texture microfiber.
- 4 In warm conditions the coating becomes dust dry after 2 hours and touch dry after 5 hours. After this, the finishing will be dry enough that you may use the vehicle again but the coating is still far from being fully cured and so avoid brushing against the surface with bags or keys.

The coating will cure faster if the surface is hot and so it will be advantageous to place the car in direct sunlight after the first 2 hours of curing.

Within the following 10 days the vehicle should not be cleaned as complete curing takes at least 8 days (depends on the temperature and the humidity), otherwise the finish may be damaged, especially if a drive through car wash is used.



643 Metal Dura Easy On Metal Coating

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature	Curing time
-5°C - +40°C,	80-150m ² (one layer)	24-48 months	Up to 24 months	+5°C - +35°C	24 hours for water resistance, 6-7 days for abrasion resistance

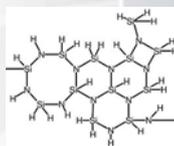
643 Dura Easy On is the newest generation of ceramic coatings. This coating offers high water and dirt repellency linked with high durability against mechanical wear on synthetic or metallic surfaces. Inorganic groups give 643 Dura Easy On perfect adhesion to the substrate and a pencil hardness of 9H. This coating can be multi layered.

Properties

- Ceramic / hybrid based substances
- Based on Silicon, with Hydrogen and Nitrogen bonding
- Pencil hardness up to 9H (harder than car paint)
- Room temperature curing or heat curing possible
- Permanent easy-to-clean effect
- Outstanding UV/weather-, abrasion and chemical resistance
- Withstands strong acid and domestic grade alkalines
- Chemically inert
- Transparent, virtually invisible
- Color deepening possible by application of several layers
- Food-safe
- Strong chemical bonding
- Free from Halogens
- High temperature-resistance up to 600°C
- Usable as an anti-graffiti coating
- Corrosion inhibiting characteristics
- Barrier properties
- Stain guard against acid (ph 2 to 12,5)
- Simple application (wipe or spray application, dipping is not recommended)
- Can be layered, (up to 3 layers)
- Contact angle 105°

Application

Clean the surface thoroughly with a residue-free cleaner. For car-paints, we recommend butyl acetate. When applying manually it is suggested that a gentle circling motion is utilized in order to ensure that no visible surplus is evident, (if required, this process be repeated up to 3 times, at intervals of 5-10 minutes in order to increase the layer thickness.) The coating becomes water-resistant after 24 hours and becomes fully cured against mechanical abrasion and chemical within 7 days. The drying time and hardness of the coating can be enhanced by the application of heat, eg apply 80°C of heat for 30 minutes to the coated item, then allow the item to cool for 3 hours, after which the coating will be fully cured.



ALGT® Plastic and Metal is ideal for use on

Car paint

- Strong dirt and water repellency
- Noticeable improvement of paint hardness
- Lifetime/longevity 3-4 years
- Protection against bird droppings
- Protection against micro-scratches caused by car washes
- Protection against small gravel impact
- Protection against color loss of the car

Metal

- Graffiti protection
- Strong dirt and water repellency
- Corrosion inhibiting characteristics

Plastic

- Graffiti protection (e.g. road signs)
- Strong dirt repellency (e.g. truck tarpaulin)

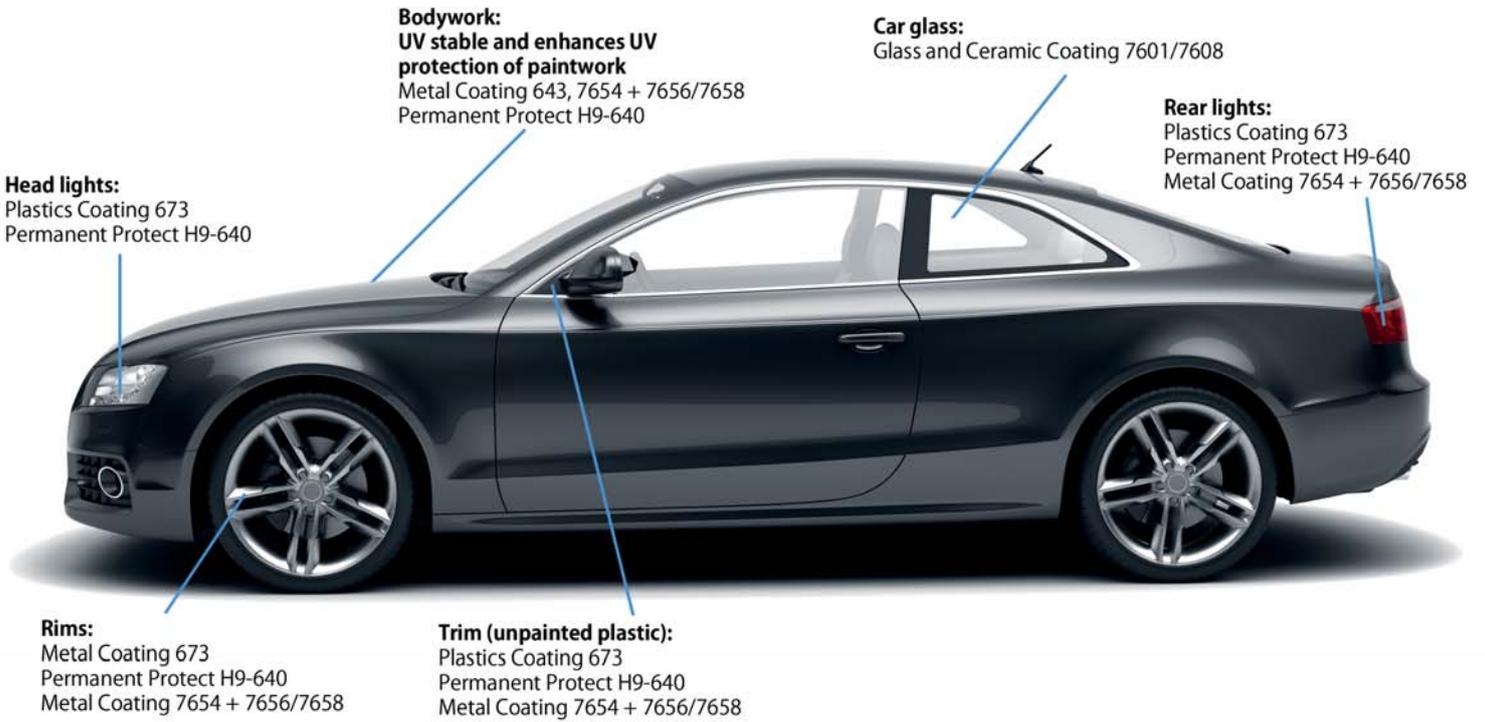
Marble / Natural Stone

- Acid resistance
- Strong dirt repellency
- Stain guard
- Food-safe (kitchen worktops)

643-50	50ml
643-100	100ml
643-1	1.000ml
643-5	5.000ml

Customs code: 3208 9019, DG

Liquid Glass Car Coatings



Seats:
Fabrics: 695/697 + 689 + 7689/7685
Leather: 7625

Dashboard:
Plastics Coating 7656/7658 + 673

Sythetic Leather:
7654 + 673



620 Stone / Mineral / Concrete Coating, penetrative

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature	Curing time
-10°C - +70°C	8-50m ² , depending on the absorbency of the stone	10-20 years or decades, depending on the nature of the stone	Plastic bottles: 5-10 years Alloy bottle: Unlimited	-10°C - +40°C	3-6 hours at 20°C (surface usable after 1-2 hours)

Unlike our standard coating for stone 695 (which is a water based topographical coating) this coating is designed to penetrate deep into the structure of the stone. After it has become established in the stone it provides massive protection against abrasion, and water ingress. Specifically developed for mineral based surfaces such as sandstone, limestone, travertine, concrete, pavers and brickwork.

The coating will remain highly effective for at least 10-20 years. This coating can be used on floors.

It is primarily designed as an anti-weathering coating for stone which significantly impedes and water ingress. On some stone (normally dense stone such as marble and granite) the coating offers additional stain resistant characteristics. Testing is always recommended before large scale application. It should not be applied to wet or moist stone. Optimum performance is established after drying for 24hrs at approximately 20C°.

Properties

- contains solvent (not water), no formation of sticky silicon films
- suitable for internal and external usage, it performs exceptionally well on smooth or rough materials.
- can be applied to large areas by spraying
- Time saving one step application - no residue after application
- permeates up to 25mm deep (depending on the stone structure)
- Highly durable, offering protection for 10-20 years or decades, depending on the nature of the stone and the application process utilised
- The coverage rate varies depending on the absorbency of the stone, approx. 8-14m² per l for highly absorbent stone to approx 20-50m² for less absorbent stone, such as granite
- colourless, no negative impact on the look or consistency of the stone
- coated surfaces remain breathable
- resistant against frost, UV light (California Test - 24,000 hours or 5 years of sunshine), salt attack (e.g. chlorides), staining,

- higher pH levels found in new masonry and pointing, water ingress, soiling, pollution, vegetation and extremely resistant to abrasion
- water/dirt-repellent, the coating reduces the amount of moisture on the surface & therefore minimises the growth of mould, moss & algae as well as discoloration due to air pollution.
- reduces significantly the uptake of water and soluble salts (e.g. chlorides)
- helps avoid unsightly dark water streaks
- easy to clean effect, treated surfaces remain cleaner for longer
- considerably reduces the amount of maintenance work required on stone buildings and it provides a cosmetically stable appearance and mechanically stable structure for many years
- soiling is easily removed with water and other agents such as BIOSATIVA®, our award winning Bio Cleaner
- is not affected by chlorine or salt water, making it ideal for pool areas while ensuring that after coating, the surface remains unchanged
- not affected by steam diffusion through the treated materials and has the top rating in Europe for active gas permeability i.e., being able to “breathe” so there is no build-up of subsurface moisture (EN ISO 7783-2, Classification I, Sp<0.14m)
- Thermal efficiency of walls is improved as stone sealer prevents water ingress
- can be used as part of a flood protection system for a building is highly effective as a waterproofing membrane
- contains aroma free Naphtha, therefore oily liquids have to be removed from the surfaces within minutes after soiling. The coating is not permanently resistant against staining from liquids such as lemon juice, red wine, olive oil etc. We recommend our “Permanent Protector” or Anti graffiti coatings for protection against such staining.
- anorganic silan-siloxan mixture



620 Stone / Mineral Coating, penetrative

Approximate coverage rates per m²

- concrete (excluding hybrid concretes with significant levels (more than 1%) of added acrylic compounds or other similar plasticising agents), appr. 10-30m² / litre, depending on the density of the concrete).
Testing above these ratios is advised.
- tiles, unglazed/porous (appr. 20-40m² / litre)
- roofing tiles (appr. 15-25m² / litre)
- brick/masonry (appr. 20-30m² / litre)
- limestone (appr. 15-25m² / litre)
- sandstone (appr. 8-15m² / litre)
- mineral plaster (appr. 15-30m² / litre)
- marble & polished marble (appr. 30-50m² / litre)
- granite – polished granite (appr. 40-70m² / litre)
- natural stone (appr. 10-30m² / litre)
- slate (appr. 15-30m² / litre), slate becomes slightly darker after application as oxidation and abrasion is reduced. Coated slate retains an “as good as new appearance” for a prolonged period)

620-1
620-200
620-1000

1.000ml bottle
200 litres barrel
1.000 litres IBC container

customs code 3209 9000, no DG
No concentrate available



7628 HydroCrete Concrete Additive SiO²

1. Product description

- Extremely strong mass-hydrophobic agent for wet-concrete
- Capillary regulating characteristic
- Protection against lime efflorescence
- High active ingredient
- Vapour diffusive
- High resistance to alkalis
- Plasticising properties (reduces brittleness, less cracking)
- Highly stressable stabilization
- Extremely weather-resistant
- Frost resistant and also resistant to de-icer
- Low dosage level

2. Functionality

7628 HydroCrete is extremely well suited as hydrophobic concrete-additive for the manufacturing of paving stones, concrete slabs and prefabricated concrete elements.

7628 HydroCrete improves concretes compaction, regulates the capillary properties of the concrete and reaches a durable and long lasting structure which is effective in reducing water absorption; this is especially evident where the fully cured concrete is used to stop rinsing moisture.

7628 HydroCrete protects the concrete against lime-efflorescences and against the growth of micro-organisms (moss, algae, fungus) on and in the structure. The final concrete-product remains vapour-diffusive.

3. Application

Stir the 7628 HydroCrete concrete additive thoroughly before use. Add the additive to the mixing water. The mixing time of the liquid should at least be 1 minute. Do not add 7628 HydroCrete to the dry concrete-mix.

4. Dosage

The recommended dosage of 7628 HydroCrete is between 1% - 1.5% of the binder content (cement). Example. To create a concrete or cement mix. Take 1kg of cement powder. Mix this with 2kg of sand and 2kg of aggregate. Mix thoroughly. Add 10-15ml of the 7628 to 1 litre of water (the amount of water will alter depending on the nature of the concrete required as will the sand/cement/aggregate ratio). Stir this liquid for a minimum of 1 minute to ensure full dispersion. Add this newly created water + additive to the concrete Mix as normal.

Please note that in this example, the 1kg of cement powder plus 10-15ml of the additive (1-1.5% of 7628 HydroCrete) is the critical ratio. If the mixture was based on 50kg of cement powder you would add between 500ml to 750ml of 7628 HydroCrete, dependent of the performance level required.

Please use different doses for two-layer concrete (core-layer and face-layer). Example: Core-concrete: Appl. 1% Facing layer: 1.5%

7628-1
7628-200
7628-1000

1.000ml bottle
200 litres barrel
1.000 litres IBC container

customs code 3824 4000, no DG

704 Multi Stone-Wood Stone / Concrete / Wood / MDF / Mineral Surfaces Coating

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature
+5°C - +40°C	20-100m ²	5 years +	12 months	+5°C - +25°C

704 Multi Stone-Wood is a SiO₂ based micron scale coating which offers massive durability linked with strong graffiti and stain resistance. It can be applied to all stone and wood surfaces either in full strength or in diluted format, in 1, 2 or 3 coats by roller, brush or spray, depending on the level of protection required. To create a matt finish, wipe the surface with a microfibre or dry brush after application. 704 Multi Stone-Wood protects the substrate completely against moisture ingress.

Properties

- topographical coating
- super durable
- solvent based
- easy-to-clean effect
- industrial coating against Lemon Juice, Red Wine and Hot Engine Oil
- 100% solid clear coat formulation
- highly resistant to staining from oil, wine, lemon juice
- micron scale coating
- can be supplied as a coloured variant (every colour) from MOQ 1.000 litres
- ready-to-use liquid, no concentrate available
- can be layered
- the penetration of water, soot, coffee, cola, ketchup, red wine etc. is reduced
- the penetration of grill fat, fuel and waste oil and dry soil into the surface and can be very easily removed
- the curing process is at room temperature and it leads to a dust dry surface just in some few minutes
- Not soluble in water
- can be applied by spray, brush, roller and dip or flow (not a „wipe on buff off“-coating)
- resistant to heat and is non flammable when cured. On stone is still active after 1000°C.
- Pre warming the surface prior to coating enhances bonding
- curing time: Dust dry after a few minutes and stackable, fully bonded after 24 hours
- withstands 1 million wiping actions with a micro-fibre tissue
- non diluted coating offers maximum performance
- on some highly absorbent surfaces and on wood flooring (diluted layer may be applied followed promptly by a non diluted layer. Apply the second layer within minutes of the initial layer, *2 parts 704 and 1 part thinner)

Dilutable with:

- Ethanol
- 1-Methoxy-2-Propanol

Use on:

- natural stones with rough/absorbent surfaces (granite, slate, basalt, sandstone, limestone)
- concrete (e.g. walls and facades)
- wood
- MDF
- roof tiles (unglazed)
- flag stones
- clinker
- plaster
- hop fittings (not suitable for polished surfaces, lightly abrade such surfaces prior to coating)
- Suitable for DIY application, no special equipment required

Stones / Concrete / Wood:

- bonds exceptional well on rough stones and concrete (needs a relatively rough surface to bond to. Not suitable for polished surfaces)
- Slightly breathable. Great performance against oil, water and domestic cleaning agents. Protects against red wine and lemon juice on marble when coated with a full layer. If a diluted layer is applied a slight belimish can occur from red wine after some hours
- Polished marble: It will adhere but if scratched hard it can be scratched off; however if the surfaces is abraded with a 60-80 Grit abrasive before hand excellent bonding will be achieved.
- Provides a glossy appearance, but wiping with a microfibre just after application creates a matt appearance.
- Excellent resistance staining on all surfaces. Anti-Graffiti.
- very good on wood

MDF

(mixture of glue and wood particulates)

MDF is a highly versatile product but when water gets into the board it expands and the board breaks down and allows further water ingress.

The coating provides exceptional protection to MDF as when it is applied to the “end grain/open edges” it prevents swelling and breakdown of the board. Ideal for kitchens and bathrooms where MDF often corrupts.

- thin coating with 704-5: is rapidly absorbent into the MDF, not glossy. Allows for painting.
- thick coating: Becomes glossy

704-5	1.000ml
704-200	200 litres barrel
704-1000	1.000 litres IBC container

customs code 3208 9019, DG

7656 Plastic-Metal Premium / 7658 (Concentrate) Coating for Plastics, Metal, Painted Surfaces, Stainless Steel & Metal

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature	Curing time
-25°C - +50°C, also in sunlight	150-200m ²	outside: 1-3 years, under German weather conditions, inside: 5-10 years	2 years	-10°C - +40°C	12 hours at 20°C (surface usable after one hour)

Properties

- clear, colourless liquid, virtually undetectable, surfaces look and feel the same after application but they may look slightly brighter
- invisible to the human eye (coating thickness: 100-150 nm)
- easy to apply and re apply („do-it-yourself“)
- strong hydrophobicity and oleophobicity
- strong non-stick properties
- permanent, the permanent chemical bond with the substrate enables excellent abrasion resistance
- resistant to almost all standard household and industrial cleaners (with the exception of concentrated lye)
- breathable
- Resistant against temperature (frost and extreme heat or UV exposure), to salt, hard water minerals, seawater, salty air and alkali
- The UV-stability enable functionality for a number of years, approximately the lifetime of the coated surface (not damaged by sunlight)
- anti-soiling, water and dirt-repellent
- helps to prevent water marks, dirt, algae and bird fouling from adhering to plastics
- no scraping, scrubbing or harsh chemical cleaners needed as soiling agents do not bond to the coated surface
- easy to clean effect, treated surfaces remain clean for prolonged periods, this reduces cleaning time and the costs for cleaning and care
- drastically reduces cleaning frequencies, saving energy, time and cost
- no need to be re-applied after cleaning the surface.
- reduces the growth of micro-organisms and bacteria
- enhanced hygiene due to biostatic characteristics
- food-safe (inert)
- will considerably reduce surface friction
- exceptionally long durability (up 3-10 years in most conditions)
- exceptionally long shelf life (over 5 years)

Some of the testing associated with this coating:	
Test according to	Description
ISO 11507	Artificial weathering with fluorescent UV lamps + water (method A)
DIN 55620-1+2	Determination the contact angle
DIN EN ISO 11998:2008	Determination of the wet-scrub resistance and cleanability of coatings
BS-EN 1186:2002	Migration Test on coated plastic surface
CCM lab	Contact angle

7656 Plastic-Metal Premium is ideal in environments such as

- Plastic surfaces in sanitary areas (e.g. plexi®-glass shower cabinet)
- Automotive paint (protection for up to 2 years)
- Painted aluminium rims
- Stainless steel surfaces

7656-1	1.000ml bottle
7656-200	200 litres barrel
7656-1000	1.000 litres IBC container

Customs code: 3824 9092, DG

Concentrate for 20 litres:	
Component	7658
A	400g
B	400g

Purchased from local supplier:	
Ethanol (EtOH) 99% or higher	19,3 litres
Hydrochloric acid 37% (HCl) CAS No.: 7647-01-0	40g

1018 TiO² Glass DIY

Photo-catalytic, strongly hydrophilic coating for Glass (e.g. Solar Panels & Window Glass) & Plastics

Key Features:

- Application Temperature: 10-40°C
- Coverage Rate per litre: 50-100 m²
- Active life of coating: Appr. 12 months for the first application, appr. 18 months for the second
- Shelf life of the liquid: 12-24 months
- Storage Temperature: +5 - +40°C
- Curing time: 8-24 hours (8h at 40°C, 24h at 10°C)

Customs code: 3209 9000, no DG

Properties

- Water-based
- Hydrophilic
- Shelf life: Appr. 12 months for the first application, appr. 18 months for the second
- Withstands up to 150°C (peak: 200°C)
- Room temperature curing
- Easy-to-apply

1018-1	1.000ml
1018-5	5.000ml

7654 WB Rapid On (water based) / 7659 (Concentrate) Metal and Plastic Coating. Easy-to-use. Usable also as Finish for 640

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature	Curing time
0°C - +45°C,	100m ²	3-6 months	1 year, diluted with medical grade De ionised water: 2 years.	+10°C - +30°C (protect from sunshine)	5 minutes, immediately usable

Properties

- water-based
- solvent-free
- no odour
- excellent water-repellency
- high-gloss effect
- silky smooth surface haptic
- resistant to nearly all acids, solvents and domestic grade alkaline cleaners
- easy-to-clean effect (e.g. from impurities produced by insects, bird droppings, exhaust pollutants, and other aggressive stains)
- very easy to apply
- much more stable than waxes or silicon-oil-based products
- UV-resistant
- non-toxic
- non-flammable
- readily biodegradable (according to OECD criteria)
- high abrasion resistance against wind-borne particles
- significant overall reduction of re-soiling
- temperature resistant from -40 - +200°C
- pH resistant from 1-10
- not cytotoxic due to ISO 10993-5 + 12
- inhibit bacteria growth
- density about 1,00 g/cm³
- thickness of the layer: Appr. 40-50nm
- VOC free

Application

Thoroughly clean the surface. Spray or wipe on the ready-to-use solution to, the whole surface. eg on a car apply to one panel at a time. Remove surplus either by using water, or by wiping with a soft cloth or by polishing with a chamois.

Properties

- water-based
- solvent-free
- no odour
- excellent water-repellency
- high-gloss effect
- silky smooth surface haptic

7654 WB Rapid On is ideal for use on

- cars (as stand-alone coating or as "finish" on top of our 640 coating, one liter covers 8-10 cars)
- boats
- household eg. for shower screens, window and door frames etc.
- stainless steel surfaces
- varnished and metallic surfaces
- glass
- synthetic materials
- rubber
- chrome
- Visors (ski goggles and motor cycle helmets, especially where there is concern about the use of solvent based coatings)

Tests according to	Description
ASTM F 1110	Sandwich Corrosion Test
ASTM F 484 Type C	Acrylic Crazeing Test
ASTM F 502	Paint Softening Test
ASTM F 519-93	Hydrogen Embrittlement Test
Boeing	Boeing Certified
DuPont™ Marine Finishes	7654 products range - dedicated to the yachting sector have been tested over DuPont™ Marine Finishes Topgloss SF and DP6940 Imron® Super Flow HS Clearcoat. No negative effect on coating has been observed.

7654-1 1.000ml bottle
7654-200 200 litres barrel
7654-1000 1.000 litres IBC container

Customs code: 3402 9090, no DG

Concentrate
7659-1 coating: 3% = for 33,33 litres
 maintenance: 1.5% = 66,66 litres

Customs code: 3402 9090, no DG

660 „Polish“ for Plastics and Metal 2 in 1

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature	Curing Time
-25°C - +80°C, suitable for application in direct sunlight	40-50m ²	up to 3 years on internal surfaces not subjected to abrasion	Plastic bottles: 2 years	-5°C - +30°C	12 hours at 20°C (surface usable after one hour)

Unlike our standard coating this SiO₂ based polish is an emulsion. The coating is very easy to apply and it withstands high levels of soiling and abrasion. Simply wipe on and buff off. This polish contains particles that are much smaller than a regular polish, thus enabling it penetrate deeper into the structure of the surface.

Properties

- is ideally suited as a water-/dirt-repellent surface modifier for non-absorbent substrates in outdoor and indoor areas
- polishes and protects in one easy single application
- generates an invisible (transparent) surface modification
- surface will maintain the original appearance
- will not remove top layer of paint
- contains solvent, no waxes or silicones
- non-stick, glossy finish
- resistant to frost, friction, UV (to prevent fading), alkali, sea water, salty air, bird fouling and heavy staining
- water and dirt repellent (hydrophobic)
- prevents tar, sap and insect residues from sticking to the surface
- reduces the growth of micro-organisms and bacteria by creating a biostatic surface.
- considerably reduces drag and so offers greater efficiency for vehicles and boats
- self-cleaning effect on vertical surfaces with heavy rain
- coated surfaces can be cleaned with water or our award winning Bio Cleaner BIOSATIVA®
- the amount to be applied (20-25 ml/m²) varies depending on the topography of the surface to be coated and application cloth used; a large thick micro fibre will absorb more liquid than a small smooth micro fibre. Match the application cloth to the surface which is being coated. Use a deeper pile cloth for rougher surfaces.
- for up to 2 years on internal surfaces not subjected to abrasion
- treated surfaces remain clean for prolonged periods and are "easy to clean"
- protected surfaces reduce the costs of cleaning and care
- VOC content: 16 %

Highly suited to a wide range of uses within the "Facilities" sector, for highly polished and easy to clean surfaces, e.g.

- lifts (easy removal of fingerprints)
- foyer areas (high gloss levels, easy clean surfaces)
- window frames (polymers, aluminium)

Ideal for an up to six months protection on:

- automotive lacquer (very easy to apply and re apply)
- moterbikes
- boats / jet skis / surfboards / kayaks
- caravans / camper vans
- buses
- products made of stainless steel, gold, silver, aluminium, chrome, copper
- painted metal, metal chrome, polished steel, and GPR

- 660-1** **1.000ml bottle**
- 660-200** **200 litres barrel**
- 660-1000** **1000 litres IBC container**

Customs code: 3405 3000, no DG



Liquid Glass Home and Garden Coatings

Solar Panels:

Glass and Ceramics Coating 7601/ 7608

Bath Ceramics:

Glass and Ceramics Coating 7601/ 7608 + 601/608 + 7675/7678

Mattress:

- 695/697
- 689
- 7689/7685



Aluminium:

Universal Coating 7675/7678

Plastics:

Plastic Coating 7656/7658

Windows:

Glass and Ceramics Coating 7601/7608, 601/608 + 7675/7678

Wall:

Stone Coating 620

Fabrics:

695/697 + 689 + 7689/7685

Concrete/Stone:

- 695/697 (topographical coating)
- 620 (penetrative coating)
- 704 (very strong hydrophobicity)

Textile:

- 695/697
- 689
- 7689/7685



Wood:

- 695/697 (topographical coating)
- 620 (penetrative coating)
- 704 (very strong hydrophobicity)

+ Bacoban[®] CE certified anti pathogon protection for all surfaces inside and out.

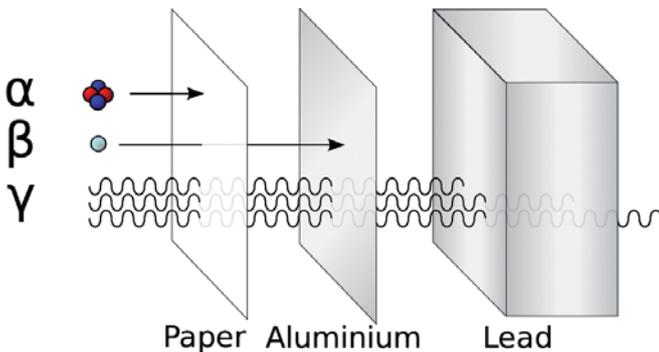
Mobile Phone Coating

Properties

- Splash resistant
- Scratch protection
- Creates a 9H Glass layer
- Completely undetectable
- Inhibits bacterial growth
- Easy-to-clean
- Easy-to-apply
- Bubble-free
- Significantly reduces micro-scratches
- With normal use lasts 1 year
- Withstands over 200.000 wiping actions
- For all devices, include "Edge" phones
- Blocks 80% of y wave radiation



Radiation comes in many frequencies. You can't stop all frequencies otherwise the phone would not work. The data tells us that the coating is effective at reducing Y wave radiation. We are not claiming the coating inhibits all frequencies, but this facility to interfere with y wave radiation is significant.



Available sachets (MOQ: 5.000 pcs. for Private Label):

Art. No.	Sachet size	Wipe size
67100	60 x 80mm	100 x 140mm
67102	60 x 80mm	60 x 70mm
67103	50 x 70mm	60 x 70mm

1 Cleaning

Reinigung

Ⓧ Reinigungstuch

Ⓧ Cleaning Wipe

2 Coating

Versiegelung

Ⓧ Versiegelungstuch

Ⓧ Coating Wipe

Made in Germany



Application Video

Some of the testing associated with these coatings:	
TÜV, MSZ ISO 18593:2008	Microbiological Test
TÜV, MSZ 9640/41:1983	Scratch hardness test with spring ball rod
TÜV, MSZ EN ISO 15184:2013	Pencil Hardness Test
TÜV, Sessile drop method	Water-Repellent, surface tension, contact angles
TÜV, DIN 51 155	Impact Test
TÜV, ICP-MS MSZ EN ISO 17294-2:2005	Metal content of the wipes
TÜV, ICP-MS + XRF	RoHs screening test
ASTM D 3363	Wolf Wilburn Pencil Hardness Test
DIN EN ISO 15184	
BS 3900-E19	
DIN EX 13523-4	
ISO 10993-1	Biocompatibility Test
ASTM E 2180-07 (Reapproved 2012)	Assessment of Antimicrobial activity (ATCC 6538, 4352 & 15442)
ISO 9001	Anti-Bacterial Test
Martens, Vickers	Hardness Test on Mobile Phone Screens
	Radiation Test on mobile phone

Customs code: 3208 9091, no DG

LiquiGlas MADE IN GERMANY

Liquid Glass Coating

Millions sold worldwide

splash resistant

scratch protection

Protect your Phone!

for all your devices

- completely undetectable
- inhibits bacterial growth
- easy-to-clean
- easy-to-apply
- bubble-free
- significantly reduces micro-scratches
- with normal use lasts 1 year
- withstands over 200.000 wiping actions
- blocks 80% of y wave radiation

creates a 9H Glass layer

For all mobile phones incl. „Edge“

LiquiGlas®, Art. Nr. 901

626 Graffiti Protection

Key Features

Application Temperature	Coverage Rate per litre	Durability of the coating	Shelf life of the liquid	Storage Temperature	Curing time
5°C to 40°C	8m ² ; less on a porous substrate	20 years	12 months in unopened container	+5°C to +25°C	1 – 3 hours, depending on conditions

626 is a dedicated anti-graffiti coating which is designed for use in commercial locations or locations where a slightly visible coating is acceptable. The benefits lie in the durability and performance of this coating. It offers years of high level performance and in many instances graffiti can be removed with water alone.

Properties

- unique one-pack, white spirit based, external coating designed to give effective protection
- against both graffiti and fly-poster attack and is a semi-transparent/clear liquid
- permanent (not a sacrificial system), allowing for repeated easy removal of any graffiti
- matt
- excellent UV-resistance
- durable for up to 20 years
- clearly visible

Use on

- rough brick
- textured finishes
- concrete
- render
- masonry
- porous stone
- timber
- previously painted surfaces

626-5 – 5.000ml canister
 customs code 3910 000, DG

800 Graffiti Remover

Key Features

Application Temperature	Coverage Rate per litre	Shelf life of the liquid	Storage Temperature
5°C to 40°C	up to 3m ² of coating depending upon the number of layers/ type of paint	24 months	+5°C to +25°C

800 is a fast acting paint remover designed for professional and DIY use. It has a gel consistency which enables use on vertical and other less accessible areas to be treated. It works rapidly to break down the surface of most coatings allowing its removal with tools or water spray.

Properties

- use indoors and outdoors
- very fast action
- does not bleach the stone
- non caustic, no neutralising required
- Methylene chloride / Dichloromethane free

Use on

Wood and masonry, metal and plastics. Other substrates should be subjected to an inconspicuous test patch to determine compatibility for use before attempting larger areas

customs code 3814 0090, DG
 800-5 – 5.000ml canister

Bacoban® Longterm Surface Disinfection Cleaning. Protecting. Coating. 3 in 1.

Water based Ready-to-use

Product

Ready-to-use disinfectant product providing long term efficacy. Does not contain Aldehyde or Phenol.

Uses

For the disinfection of “medical” areas in accordance with Directive 93/42/EEC (Medical Devices) and all types of surfaces in hospitals, doctors practices, rehabilitation centres and retirement homes. Especially useful in areas demanding effective and long-lasting hygiene.

Particularly suitable for areas where unpleasant odours caused by micro-organisms form, such as toilets and sanitary facilities. Bacoban WB may be used in critical and sensitive areas of the pharmaceutical and cosmetic industries.

Composition

100 g solution contains: benzalkonium chloride 0,26 g, sodium pyri-thione 0,025g, polycondenstaes, perfume substances, purified water.

Microbiological effectiveness

Bacoban® DL is effective against bacteria, fungi, viruses (hepatitis B and C, HIV, influenza including H5N1and H1N1, rotaviruses and adenoviruses).

Effectiveness	
DIN EN 1040	5 min.
DIN EN 1275	5 min.
DIN EN 1276	5 min.
DIN EN 1650	5 min.
DIN EN 13697	5 min.

Tested in accordance with VAH guidelines (high organic load)

Long lasting anti-viral and anti-microbial performance. Effective for up to 10 days. Complies with ASTM E 2180 standards

UBA No: 57040031 | Biocide-reg.no.: N-34071



Flow pack

50 wet wipes | wipe size 180 x 200 mm / 50g/m2
(one wipe cleans and protects approx. 1.5m²)
Languages on pack: DE, UK, F, ES
art. no. BACDLTUE

500 ml spray bottle

art. no. BAC500DI



Water based Concentrate 1 : 100

Product

Water-based surface disinfectant concentrate containing a polycondensate, a quaternary ammonium compound and sodium pyri-thione. Bacoban WB is free from aldehydes and phenol.

Uses

For the disinfection of “medical” areas in accordance with Directive 93/42/EEC (Medical Devices) and all types of surfaces in hospitals, doctors practices, rehabilitation centres and retirement homes. Especially useful in areas demanding effective and long-lasting hygiene.

Particularly suitable for areas where unpleasant odours caused by micro-organisms form, such as toilets and sanitary facilities.

Bacoban® WB may be used in critical and sensitive areas of the pharmaceutical and cosmetic industries.

Bacoban® Longterm Surface Disinfection Cleaning. Protecting. Coating. 3 in 1.

Microbiological effectiveness

Bacoban® WB is effective against: bacteria, fungi, hepatitis B and C viruses, HIV, influenza virus including H5N1, rotaviruses and adenoviruses.

Composition of product

100 g solution contains: benzalkonium chloride 26 g, sodium pyrithione 2.5 g, polycondensates, perfume substances, purified water.

Physiochemical data

Appearance:	yellow, clear liquid
Viscosity (DIN 53211):	110 sec at 2 mm opening
pH value concentrate:	5.3
pH value 1 % solution:	7.0
Density:	1.04 g/cm ³

Tested in accordance with VAH guidelines (high organic load)

Effectiveness	5 min	15 min	240 min
Tested in accordance with VAH guidelines:	2%	1,5%	
Virucidal effect conforms to *RKI / DVV- guide lines; including pathogens such as HBV, HCV, HIV, influenza, BVDV and vaccinia	1%		
Rotaviruses	0,1%		
Adenoviruses, Noroviruses			2%

Effectiveness	5 min	15 min
DIN EN 1040	0,25%	
DIN EN 1275	0,25%	
DIN EN 1276	0,75%	0,5%
DIN EN 1650	0,5%	0,25%
DIN EN13697		0,5%

UBA No: 57040031

Biocide reg.-no: N-28795



1000 ml bottle
art. no. BACWB1D

5000 ml canister
art. no. BACWB5

Nebulizer



Surface disinfection

- even
- comprehensive
- reliable
- sustained effect

Ideal for

Hospitals, Clinics, Doctor's surgeries, Laboratories, Ambulances, Rescue services, Retirement homes, Rehab centres, Thalasso therapy centres, Saunas ...

Disinfectant for nebuliser

Bacoban® DL 3 % disinfection and cleaning of medical surfaces acc. Directive 93/42/EEC (medical devices) and surfaces of all kinds in clinics, doctor's surgeries, rehab centres and residential homes. Particularly suitable for use in areas in which efficient and sustained hygiene is required.



Bacoban® Longterm Surface Disinfection Cleaning. Protecting. Coating. 3 in 1.

Also particularly suitable for areas in which unpleasant smells are generated by microorganisms, such as toilets and sanitary facilities.

Bacoban® DL 3 % can also be used in critical and sensitive areas in the pharmaceutical and chemical industries.



Water-based concentrate

Alcohol-free disinfection and cleaning of medical fixtures and other surfaces (acc. Directive 93/42/EEC, MDD)
VAH listed

Derived from this



3% Bacoban® DL ready-to-use solution

Ready-to-use solution for disinfection and cleaning of medical fixtures and other surfaces (acc. Directive 93/42/EEC, MDD)
Suitable for Bacoban® Nebuliser

Alcohol based Ready-to-use

Product

Ready-to-use, alcohol-based surface disinfectant containing a polycondensate, a quaternary ammonium compound and sodium pyrrhione. Bacoban® is free from aldehydes and phenol.

Uses

For the disinfection of alcohol-resistant "medical" areas in accordance with Directive 93/42/EEC (Medical Devices) and all types of surfaces in hospitals, doctors practices, rehabilitation centres and retirement homes. Especially useful in areas demanding effective and long-lasting hygiene. Particularly suitable for areas where unpleasant odours caused by micro-organisms form, such as toilets and sanitary facilities. Bacoban may be used in critical and sensitive areas of the pharmaceutical and cosmetic industries.

Effectiveness	5 min	15 min
DIN EN 1040	X	
DIN EN 1275	X	
DIN EN 1276	X	
DIN EN 14348		X

Long-lasting antimicrobial and virus-inactivating effect for up to 10 days tested according to ASTM E 2180

Biocide reg.-no.: N-23123

Microbiological effectiveness

Bacoban® is effective against: bacteria (incl. mycobacteria), fungi, hepatitis B and C viruses, HIV, influenza virus including H5N1, rotaviruses and adenoviruses.

Composition of product

100g solution contains: ethanol 49.4 g, isopropanol 7.1 g, benzalkonium chloride 0.71 g, sodium pyrithione 0.05 g, polycondensates, perfume substances, purified water. Contains no formaldehyde. Phenol-free.

Physicochemical data:

Appearance:	transparent liquid
Viscosity (DIN 53211):	42 sec at 2mm opening
pH value (mixture in water 1:1):	5
Density:	0.89 g/cm ³

Tested in accordance with VAH guidelines (high organic load)

Effectiveness	15 sec	30 sec	1 min	5 min	15 min
Tested in accordance with VAH guidelines: bacteria and fungi				X	
Mycobacteria					X
RKI /DVV- guide lines; including pathogens such as HBV, HCV, HIV, influenza, BVDV and vaccinia		X			
Rotaviruses	X				
Adenoviruses			X		



5.000 ml canister
art. no. BAC5000

500 ml pump spray
art. no. BAC500

PEDEXAN® Longterm Shoe Disinfection

Odour created as a result of perspiration occurs when bacteria (predominately Brevibacterium epidermis on feet) decompose sweat. Athletes foot is a very common skin disorder and it is often caused by pathogens such as filamentous fungi (dermatophytes) and yeast (candida)

Pedexan® provides a highly effective remedy as it...

- ▶ kills bacteria and fungi within minutes
- ▶ creates an environment in which micro-organisms are unable to survive.
- ▶ provides highly durable and long lasting protection
- ▶ effectively combats odors
- ▶ helps to prevent foot infections
- ▶ is bio-compatible



125ml pump spray
art. no. PED125A



1000ml refill bottle
art. no. PED1000A

Shoe Disinfection Dispenser with spray lance

- ▶ for fixed, large scale application or mobile use
- ▶ Ideal for the hygienic treatment of footwear, e.g. ski boot rental, bowling alleys, hospitals, poultry plants, gyms, orthopaedic technology centres, airports, etc.

Suitable for the 1-litre refill bottle.

Simple to apply

- ▶ Spray into the shoe.
- ▶ We recommend three applications per week.
- ▶ With regular application a „cumulative“ anti-microbial effect is created. This effect can last for several weeks.



art. no. PEDSPEND

Private Label



Wet wipes (dispensing tubs round, oval & with hinged lid, dispensing buckets and flowpacks)



Pump spray bottles made of plastic and aluminium, from 7-500ml, several bottle shapes available



Aerosols



Single/Double sachets

We fulfil your wishes with

- ▶ reasonable prices
- ▶ Workable MOQ's
- ▶ Products Made in Germany
- ▶ Upon request our service also includes artwork creation

How to find us

1. Coming from the federal Autobahn 4 towards Köln

Turn right when you reach the Autobahn exit „Overath“. At the second traffic light turn right (next to McDonalds) and turn left after the Citroen car-dealer to the industrial area „Diepenbroich“. Turn right as soon as possible. CCM will be in the second building on the right hand side.

2. Coming from the federal Autobahn 4 towards Olpe

Turn left when you reach the Autobahn exit „Overath“. At the next traffic light turn right (next to McDonalds) and turn left after the Citroen car-dealer to the industrial area „Diepenbroich“. Turn right as soon as possible. CCM will be in the second building on the right hand side.

CCM GmbH

Diepenbroich 8 • D-51491 Overath
Phone +49 (0) 2206 938 590 -0 / Fax -99
E-Mail info@ccm-international.eu
www.ccm-international.eu

3. Coming from the federal Autobahn 3 towards Köln

Exit the Autobahn when you reach „Lohmar-Nord“. Follow the federal highway B484 towards „Overath“ (about 10 km). At the crossing in Overath you have to turn right. Drive on to „Engelskirchen“ using the B55. After about a kilometre turn left (next to McDonalds) and turn left after the Citroen car-dealer to the industrial area „Diepenbroich“.

Turn right as soon as possible. CCM will be in the second building on the right hand side.

