

# AIRDAL® Spray

**AIRDAL®**, consisting of **AIRDAL-CLEANER+PRIMER** and **AIRDAL-COATING**, is a protection system for the permanent, antibacterial & virucidal treatment of surfaces.

## Product Feature

AIRDAL is a 100% transparent, permanent, self-disinfecting and antimicrobial coating. Once applied it forms a long-lasting, wear resistant ultra thin layer of amorphous glass. The unique and innovative bactericidal and virucidal properties are proven by independent and accredited laboratories. In addition it prevents odours, the growth of mold, fungus and yeast. The driving technology won 2019 the prestigious German Innovation Award. AIRDAL protects nearly all kind of surfaces and makes cleaning easier. The antimicrobial effect verifiable lasts up to 12 months.

## Application

It is certified for the use in aircraft cabins. Following aerospace certificates are available:

- Boeing Document D6-7127
- AMS 1452C  
Conforms with all tested materials like transparent plastics, painted surfaces, rubber, vinyl and tedlar surfaces
- AMS 1453A  
Conforms with all tested materials like plastics, painted surfaces, unpainted surfaces
- Lufthansa test report 190125\_012

**AIRDAL®** can be applied in all areas of the cabin: tray tables, arm rests, input devices, touchscreens, handles, overhead stowage compartments, interior panels (lining in general), lavatories, galleys, social areas, self-service bars etc. Textile and leather seat covers can also be coated and protected. The high wear requires a more frequent application.

## Mode of action

Compared to current chemical disinfectants, whereby a new colonisation starts shortly after the cleaning process, AIRDAL® destroys the germs physically, day by day, month by month. After the application AIRDAL® builds a positive charged coating that attracts the negative charged cell membranes of the germs, which then are perforated at contact. This kills the germs and prevents new colonisation and mutation.

## Application Spray

Spray non-absorbing surfaces with **AIRDAL® - CLEANER + PRIMER** Spray. Degrease and clean the complete surface. Polish the surface with a cotton or microfibre cloth until it is free from smears and completely dry. Immediately afterwards, apply the **AIRDAL® - COATING** spray (step 2). Coat the surface completely with the **AIRDAL® - COATING** spray. Polish the surface with a cotton or microfibre cloth until it is free from smears and completely dry. The coated surface can be used again after 6 hours drying time (room temperature). Please note: Once opened, only use until expiry date. Sanitizers should be used with care. Wear gloves. Read labelling and product information before use.

Absorbing surfaces like textiles and leather do not require the application of **AIRDAL® - CLEANER + PRIMER** Spray. These surfaces can be coated directly with **AIRDAL® - COATING**. The coated surface can be used again after 6 hours drying time (room temperature).

**Compatible surfaces**

Plastics, glass fiber, metals, glass, wood, ceramics, stones, natural materials, composites: including air filters for ovens, air conditioning systems, air purification devices, vehicles and air recirculation systems; car and aircraft components

**Listing I Approval I Registration**

BFR 7289496 | BAuA Reg. No. N-81397 | PT2 | PT9 | CAS: 27668-52-6 | EC: 248-595-8

Harmonized tariff No. 3824 9992

Test certificates of the antimicrobial and virucidal efficacy can be found on our website [www.airdal.eu](http://www.airdal.eu) under certificates.

**Chemical basis**

Modified silicon dioxide

**Layer thickness**

approx. 150-300 nm

**Temperature stability**

-20°C to +150°C °

**Chemical stability**

solvent-resistant

**Weatherproof**

2000 h according to ISO 11507 A

(corresponds to ca. 3-4 years)

**Resilience (mechanical)**

Glass. ceramic > 40.000 cycles according to ISO 11998 (cleaning with water)

Noble metals > 20.000 cycles according to ISO 11998 (cleaning with water)

Plastics > 5.000 cycles according to ISO 11998 (cleaning with water)

**Duration of Anti-Microbial effect**

12 months +

**Salt water resistant**

Yes

**Storage stability**

24 months

**Storage temperature sensitivity**

+ 3°C to + 40°C

**Yield**

5 ml for up to 1 m<sup>2</sup> on non-absorbing surfaces

40ml – approx. 100 ml for up to 1m<sup>2</sup> on absorbing surfaces (depending on the absorptivity of the surface)

200 ml for up to 1m<sup>2</sup> on surfaces with very high absorbtivity