# Outstanding additive for plasticized PVC





# Sanitized® PL 14-32 OEKO-TEX® listed durable protection for plasticized PVC

Plasticized PVC is very sensitive to attacks from microbes. Microbial growth produces unsightly stains and material damage causing stiffness and brittleness. Cracks begin to form and subsequently the material starts to decompose. Such a negative change in appearance and the resulting shortened product life cycle leads to a reduced product quality.

Sanitized® PL 14-32 is an extremely durable antimicrobial additive, that is OEKO-TEX® listed and protects your plasticized PVC articles against a broad range of microbes. The effectiveness has been tested and proven according to internationally recognized industry standards. Secure a competitive advantage in the marketplace with the Sanitized® hygiene function, offering your customers more peace of mind, material protection and long-lasting, sustainable plasticized PVC.



## Sanitized® PL 14-32 Long-lasting protection for plasticized PVC

### Fields of application

Antimicrobial protection for PVC plastisols for textile and surface coatings:

- Indoor applications like floorings, coated furniture fabrics, shower curtains, awnings, artificial leather
- \_ Outdoor applications like swimming pool liners, roof liners, lining foils, architectural membranes, cable casings, tarpaulins, tents, garden hoses
- \_ Clothing like rain wear, protective wear, shoes, boots

### **Product properties**

Delivery form: off-white-colored viscous dispersion

Density: 1.19 g/cm<sup>3</sup> (20°C) Viscosity: pseudoplastic dispersion

Sanitized® PL 14-32 is available as ready-to-use, easy to dose

and pumpable plastisol formulation.

### **Activity spectrum**

Sanitized® PL 14-32 consist of carefully selected active ingredients, which protect plasticized PVC comprehensively and durably against a broad range of microbes:

- \_ Mildew and mold that destroy plasticized PVC and cause discoloration
- \_ Streptoverticillium reticulum leads to unsightly Pink Stain
- Yeast forms slimy surfaces
- \_ Bacteria that cause unpleasant odors and stains
- \_ Algae which cause slimy films and green or red stains

The effectiveness of Sanitized® PL 14-32 has been tested and proven according to internationally recognized industry standards in our microbiological laboratory.

### **Recommended concentration**

- -0.4-0.6% (typical)
- \_\_ 0.6 1.0 % (articles having increased requirements for antimicrobial protection because they are heavily soiled or are constantly in contact with water)



Pink Stain growth on plasticized PVC

### **Durability**

Sanitized® PL 14-32 has an outstanding leaching resistance. Therefore, it is an excellent alternative to traditional DCOIT protection.

Sanitized® PL 14-32 has a durable effect against the most common mold fungi like Trichoderma sp. and Aspergillus sp. even in applications with water.

Product	Applied quantity (%)	Applied quantity (ppm)	Determination of the inhibition zone around the specimen	
			Trichoderma virens ATCC 9645	Aspergillus niger ATCC 6275
Negative Control	-	-	Full growth*	Full growth*
DCOIT (20 %)	1.0	2000	Full growth*	Full growth*
Sanitized® PL 14-32	0.7	1680	0 mm**	0 mm**

Leaching resistance after 500 hours water exposure of Sanitized® PL 14-32 vs. DCOIT in plasticized PVC, according to SAN BIO 12/94.

- \*Full growth in the contact zone under the sample: The sample has an insufficient antifungal protection.
- \*\*0 mm inhibition zone: The sample is completely protected against the growth of the tested germ and shows a good effect.

In addition Sanitized® PL 14-32 demonstrates very good light fastness properties.

Product	Applied quantity (%)	Applied quantity (ppm)	Visual evaluation of the surface parts that have been discolored by staining beneath the specific sample
Negative Control	-	-	4***
DCOIT (20 %)	1.5	3000	3**
Sanitized® PL 14-32	1.0	2400	0*

Light fastness properties after 500 UV exposure of Sanitized® PL 14-32 vs. DCOIT in plasticized PVC, according to ASTM E 1428-99.

- \*Mark 0: No Staining: The sample shows an excellent efficacy against staining (Pink Stain) caused by Streptoverticillium reticulum.
- \*\*Mark 3: Slightly staining (30 up to 50 % covered): The sample shows an insufficient protection against staining (Pink Stain) caused by Streptoverticillium
- \*\*\*Mark 4: Strong staining that covers more than 50 % of the sample surface: The sample shows an insufficient protection against staining (Pink Stain) caused by Streptoverticillium reticulum

### Safety

Sanitized® PL 14-32 is non-volatile. Sanitized® PL 14-32 is listed in OEKO-TEX® Standard 100, classes I-IV and it does not contain phthalates, arsenic, cadmium, TBT, mercury or lead. The active substances are supported under the BPR for the relevant product type (PT). The biocidal product Sanitized® PL 14-32 will be supported by SANITIZED AG under the EU's BPR (the availability needs to be checked on request for each EU member state).