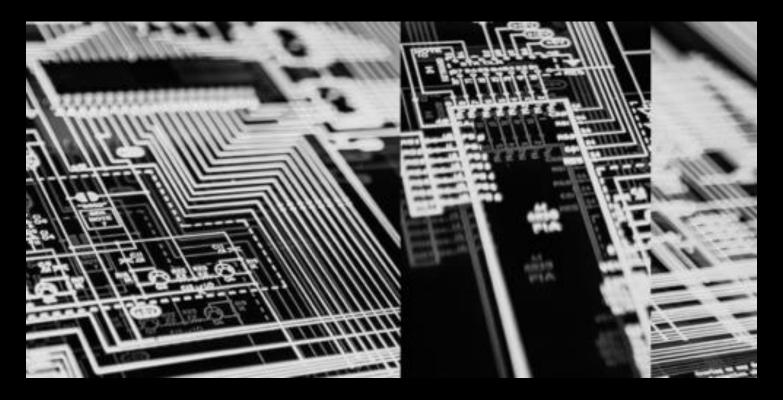
## TURKUS-LAINER

TECHNICAL DATA SHEET REVISION 03/2024



p—flex® esd

Thin-layered, polyurethane, smooth anti-static system intended for use in low-traffic facilities with moderate mechanical loads.

The P—Flex® ESD system meets the following normalized requirement for static electricity protection:

Static electricity protection for areas with explosive hazard as per PN-E-05204:1994

Static electricity protection for areas with explosive atmosphere as per IEC TS 60079-32-1:2013

Static electricity protection in areas where electronic equipment susceptible to static charges are handled

as per PN-EN ISO 61340-5-1

Shock protection of personnel handling low voltage electrical equipment, below 250V





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p—flex® esd

### A - SYSTEM CHARACTERISTICS

<b>U</b> vu	resistant to UV action	<u> </u>	resistant to chemical action
<u>}</u>	resistant to mechanical action	<b></b>	available in six colors
<u>*</u>	anti-slip	<b>†</b>	monolithic

### B — TECHNICAL DATA

Abrasion resistance	as per PN-EN 1504-2	< 3000 mg
High compressive strength	as per PN-EN 13813	48 Mpa
High flexural strength	as per PN-EN 13813	29 Mpa
Capillary absorption and water permeability	as per PN-EN 1504-2	0,01 kg/m <sup>2</sup> x h <sup>0,5</sup>
Reaction to fire classification	as per PN-EN 13501-1+A1:2010	B <sub>ff</sub> -s1
Impact resistance	as per PN-EN 1504-2	Class II: ≥ 10 Nm
VOC emission	as per PN-EN ISO 16000-6	Class A+
Anti-slip class	as per DIN 51130	R9
Anti slip class	as per PN-EN 1504-2	Class II: ≥ 40

Warning: samples were tested after 28 days at temperature 20°C

p-flex® esd

C - APPLICATION

The anti-static P—Flex® ESD system is dedicated for:

- facilities and areas with explosion hazard
- facilities and areas with explosive atmosphere
- facilities in which electronic equipment requires protection from static discharge
- facilities in which personnel requires protection from electric shock

#### D - CERTIFICATES AND STANDARDS

- Hygiene Certificate issued by the Medical University in Gdańsk, Institute of Environmental Toxicology — 299/322/305/2021
- Reaction to fire classification report issued by the Institute of Ceramics and Construction Materials
  SG-97/16/N
- Mechanical strength testing report issued by SPEKTROCHEM Research and Development Center for Paints, Adhesives and Polymers — 1074/2016
- VOC emission report and strength testing report issued by SPEKTROCHEM Research and Development Center for Paints, Adhesives and Polymers
  - 193/L2017

### E - SUBSURFACE

Subsurface quality

The base layer is typically concrete or polymer.

The base layer must be clean and free of dust and other loose particles.

The concrete layer should feature at least 1,5 N/mm<sup>2</sup> of tensile strength.

It is absolutely necessary to remove any kind of grease and oil contamination, deposits of paint, chemicals and laitance.

Preparation

The best method of subsurface preparation is dust-free shot peening. It is permissible to use other methods of preparation, e.g. milling, manual or machine grinding, etc.

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### p-flex® esd

#### F - APPLICATION INSTRUCTION

### Application conditions

Max. subsurface humidity 4% per weight Ambient temperature from +10°C to +30°C Subsurface temperature from +10°C to +30°C Maximum relative air humidity 70% Dew point - subsurface and uncured flooring temperature must exceed the dew point by 3°C at all times.

- P—Flex® ESD system components are provided in sets which are ready to mix. Do not separate the packaging into smaller portions. Processing time:
- E-Vers® 100 100:50 (A+B)

~30 min.

- E-Vers® WP Conductive 20:100 (A+B)~30 min.
- P-Flex® ESD 100:20 (A+B)

~30 min. v times are provide

Warning: product application suitability times are provided assuming temperature +18°C.

### System components:

E—Vers® 100 priming layer
 E—Vers® WP Conductive main layer
 P—Flex® ESD encapsulating layer

### Zużycie:

### Tool cleaning

Tool cleaning after work should be carried out in a designated area away from manufacturing facilities and place of application. Use e.g. xylene or acetone to clean the tools. During washing and cleaning, observe the instructions provided by the solvent manufacturer and avoid spillage on newly applied flooring. Handling of used component packaging is provided in the MSDS of each component.

Warning: detailed application instructions are available for authorized contractors.

### G - FULL CURE TIME

In temperature conditions between 15°C and 25°C, assume the following values:

•	Pedestrian traffic	24 hours
•	Lekki ruch kołowy	4 days
•	Pełne utwardzenie	7 days

H - PACKAGING / WEIGHT

All P—Flex® ESD components are provided in factory-sealed containers with indicated net weight:

- E—Vers® 100
- comp. A-20 kg, comp. B-10 kg
- E-Vers® WP Conductive comp. A-1,4 kg, comp. B-7 kg
- P-Flex® ESD

comp. A-7,0 kg, comp. B-1,4 kg

p—flex® esd

I - STORAGE

All the materials comprising the P—Flex® ESD system should be kept in dry and shaded areas. Optimal storage temperature is 15-20°C. Storage time for unopened and undamaged containers is 24 months.

J - REMARKS

Some of the poured flooring components are harmful to health when not fully cured. May cause allergies in particularly susceptible individuals. Exercise special care when carrying out work. Facilities in which poured flooring is prepared and applies should be well ventilated. Employees should use: protective clothing, footwear, glasses and gloves. Detailed safety instructions are provided in the component MSDS. Polyurethane flooring compounds are physiologically inert to the human body when fully cured. For each material and component, MSDS are provided with detailed OHS information.

K - FINAL REMARKS

LAINER, a limited liability company and limited partnership guarantees the best quality of supplied materials and assumes full responsibility for any defects in found offered products. Please be advised, due to high variance of installation conditions and applications of LAINER products, information provided herein should be considered as general application guidelines. The Customer assumes sole responsibility for the use of product without prior consultation with LAINER in areas of applications different than provided in this data sheet as well as for any consequent damages resulting therefrom. All the materials are to be used and handled exclusively by trained and experienced contractor teams. Directly prior to the application, the Customer is obligated to check the condition of the subsurface, climate conditions and material quality.

All the descriptions, illustrations, photographs, data, ratios, weights, etc. provided herein are subject to change without notice.

This document shall expire on issue of a new edition thereof.

