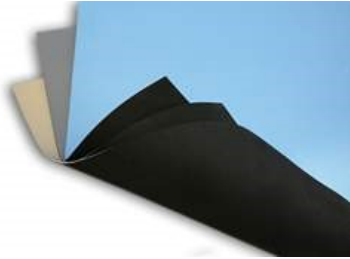


# Art. 157KIT ESD RUBBER BENCHMAT KIT

TECHNICAL SHEET # EPA30E  
Meet: IEC 61340-5-1



## GENERAL

ELME 157 KIT has been designed to provide an effective grounding of the WORKSTATION. The cuts of the materials are designed to fit in the majority of the workstation sizes. Each mat has a separate ground cord with 1 Mohm resistor, and 5mm metal ring termination.

## MAT KITS FEATURES

- Material: ELME 157 rubber matting, high temperature resistant, double layer
- 157 benchmat size: 400X600, 600x900mm, and 600x1200mm (rounded corners cut)
- Colours available: grey, blue, beige
- The packaging includes the **anti-allergenic ONE TOUCH wristband** set, and the **601 safety ground cord** (1 MOhm SAFETY RESISTOR and ring terminal, 3m long)
- The outer packaging is a plastic flexible tube transparent
- **The 157 KITS meet specifications of IEC 61340-5-1:2007 STD.**

<b>157 KIT 4060 BLUE</b>	Kit with mat 400x600mm, colour light blue	Weight 700gr
<b>157 KIT 4060 GREY</b>	Kit with mat 400x600mm, colour grey	Weight 700gr
<b>157 KIT 4060 BEIGE</b>	Kit with mat 400x600mm, colour beige	Weight 700gr
<b>157 KIT 6090 BLUE</b>	Kit with mat 600x900mm, colour light blue	Weight 1400gr
<b>157 KIT 6090 GREY</b>	Kit with mat 600x900mm, colour grey	Weight 1400gr
<b>157 KIT 6090 BEIGE</b>	Kit with mat 600x900mm, colour beige	Weight 1400gr
<b>157 KIT 60120 BLUE</b>	Kit with mat 600x1200mm, colour light blue	Weight 2000gr
<b>157 KIT 60120 GREY</b>	Kit with mat 600x1200mm, colour grey	Weight 2000gr
<b>157 KIT 60120 BEIGE</b>	Kit with mat 600x1200mm, colour beige	Weight 2000gr

## GENERAL MATERIAL SPECS

### STANDARDS MET

### MATERIAL STRUCTURE

### DRAINAGE OF STATIC CHARGES

### COLOURS AVAILABLE LIGHT REFLECTION

### FLAMMABILITY SAFETY

### HEAT CLEANING RESISTANCE TO OIL RESISTANCE TO CHEMICALS RESISTANCE TO HUMIDITY ESD GROUNDING

### WEIGHT THICKNESS MATERIAL ROLLS

### CLEAN ROOM HARDNESS

IEC 61340-5-1:2007, ANSI/ESD 2020

**synthetic rubber** double layer

- upper layer: coloured static dissipative

- bottom layer: black conductive

The static charge passes through the upper static dissipative layer to the lower conductive layer towards the ground. In this way the drainage of the static charges does not involve any sensitive device on the mat.

**beige - grey - light blue**

beige 29% DIN 5036

grey 19% DIN 5036

light blue 29% DIN 5036

**unflammable** (DIN 51960)

**no noxious gas emission, no halogens contained**

**withstands more than 500°C**

clean regularly. NO RESIDUES.

resists to most paraffinic and naphthenic oils

high resistance to most chemicals (see list)

no humidity absorption

use 1 Mohm resistor on the ground cord

2,7 Kg/sqm

2 mm.

- 1,22 X 10m - 12,20m<sup>2</sup>

- 1,00 X 10m - 10,00m<sup>2</sup>

no particle emission, suitable for clean room usage

75-80 ShoreA

## ESD FEATURES—INTERNATIONAL ESD STANDARDS



Surface ( point to point) resistance	NFPA 99 <b>IEC 61340-5-1</b> EOS/ESD-S4.1 - 1990 100V EOS/ESD-S4.1 1990 10V	$1 \times 10^{**7} - 1 \times 10^{**9}$ <b><math>5 \times 10^{**6} - 5 \times 10^{**8}</math></b> $1 \times 10^{**7} - 1 \times 10^{**8}$ $1 \times 10^{**7} - 1 \times 10^{**8}$
Volume resistance	DIN 51953	$5 \times 10^{**6} - 5 \times 10^{**8}$
Resistance to ground	NFPA 99 <b>IEC 61340-5-1</b> EOS/ESD-S4.1 - 1990 100V EOS/ESD-S4.1 - 1990 10V	$1 \times 10^{**6} - 1 \times 10^{**9}$ <b><math>5 \times 10^{**6} - 5 \times 10^{**8}</math></b> $5 \times 10^{**6} - 5 \times 10^{**7}$ $1 \times 10^{**7} - 1 \times 10^{**8}$
Charge decay	NFPA 99 (5000 to 500V) FTM 101C No. 4046 (5000V to 500V) FTM 101C No. 4046 (5000V to 50V)	< 0,05 sec. 0,009 seconds 0,034 seconds

### RESISTANCE TO CHEMICALS

CHEMICALS CONCENTRATION	EXPOSURE PERIOD		
	2 MIN.	1 HOUR	24 HOURS
<i>according DIN 51958</i>			
ACETIC ACID (5%)	NA	NA	NA
AMMONIA (10%)	NA	NA	NA
SULPHURIC (3%)	NA	NA	NA
NITRIC ACID (10%)	NA	NA	AA
HIDROCLORIC ACID (10%)	NA	NA	AA
SODIUM IDRATE (10%)	NA	NA	AA
SODIUM HYPOCHLORITE (10%)	NA	NA	NA
SODIUM CARBONATED (SAT.)	NA	NA	NA
HYDROGEN PEROXIDE (3%)	NA	NA	NA
ETHYL ACHOOL (50%)	NA	NA	NA
OIL ASTM 1	NA	NA	AA
OIL ASTM 3	NA	NA	AA
PETROLEUM	NA	NA	AA
BLACK PRINTING INK	NA	NA	AA
PERCHLOROETHYLEN	NA	NA	AA, HA
BEER	NA	NA	NA
BUTTER	NA	NA	AA
CITRATE ACID	NA	NA	AA
COCA-COLA	NA	NA	NA
FRUIT JUICE	NA	NA	NA
THE	NA	NA	NA
COFFEE	NA	NA	AA

**NA = NO ALTERATION**  
**AA = APPEARANCE ALTERATION**  
**HA = HARDNESS ALTERATION**

*The datas shown above are intended only as general indication of the standard production values. The do not refer to specific production lots. The document has no legal value.*