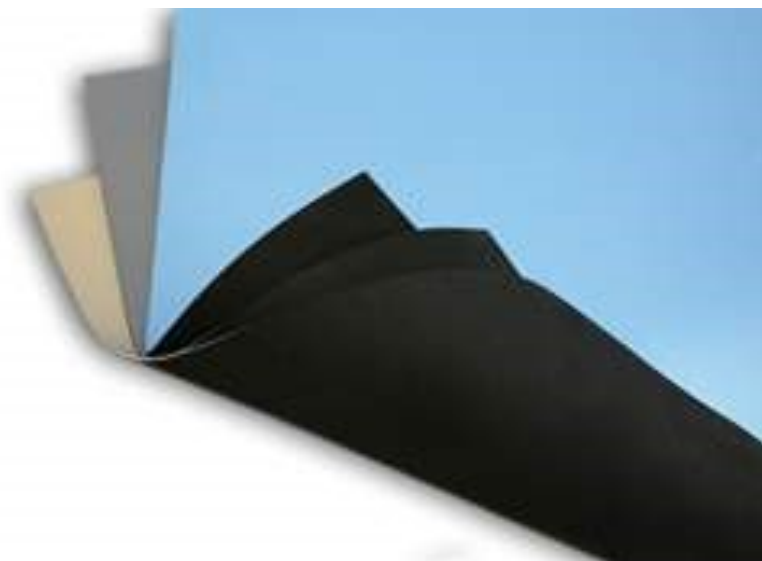


Art. 157

E.P.A. ESD RUBBER BENCHMAT

TECHNICAL SHEET # EPA01E
Meet: IEC 61340-5-1



GENERAL	
STANDARDS	IEC 61340-5-1:2007, EN 100015 , ANSI/ESD 2020
MATERIAL	synthetic rubber double layer
STRUCTURE	- upper layer: coloured static dissipative
	- bottom layer: black conductive
DRAINAGE OF STATIC CHARGES	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.
COLOURS AVAILABLE	beige - grey - light blue
LIGHT REFLECTION	beige 29% DIN 5036
	grey 19% DIN 5036
	light blue 29% DIN 5036
FLAMMABILITY	unflammable (DIN 51960)
SAFETY	no noxious gas emission, no halogens contained
HEAT RESISTANCE	withstands more than 440°C
CLEANING	clean regularly. No residues must remain on surface. Suggested EPACEA-NER (ELME)
RESISTANCE TO OIL	resists to most paraffinic and naphthenic oils
CHEMICALS	high resistance to most chemicals (see list)
HUMIDITY	no humidity absorption
GROUNDING	use 1 Mohm resistor on the ground cord
WEIGHT	3,1 Kg/sqm
THICKNESS	2 mm.
Art 157ROLL 1.2	1,22 X 10m - 12,20m ² —WEIGHT: 37,88kg
Art 157ROLL 1.0	1,00 X 10m - 10m ² —WEIGHT: 31,00kg
CLEAN ROOM APPLICATION	no particle emission, suitable for clean room usage
HARDNESS	75-80 ShoreA
ABRASION RESISTANCE	< 200mm ³

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

CHEMICALS CONCENTRATION	EXPOSURE PERIOD		
<i>according DIN 51958</i>	2 MIN.	1 HOUR	24 HOURS
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.