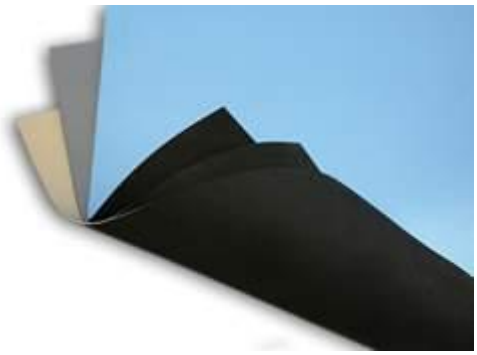
Technical data sheet # EPA01E

Art. 157
STATIC DISSIPATIVE SOFT TABLE MATS
High Temperature Resistant



GENERAL

- **STANDARDS** — **IEC 61340-5-1:2007, EN 100015 , ESDA 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 - green
- **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** — **withstands more than 440°C**
- **CLEANING** — use dedicated ESD mats cleaners. Surface is high density for no surface dirt penetration
- **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** — 2,7 Kg/sqm
- **THICKNESS** — 2 mm.
- **WEIGHT** — 2,7 Kg/sqm
- **ROLLS** — 1,22 X 10m
- **CLEAN ROOM** — no particle emission, suitable for clean room usage
- **HARDNESS** — 75-80 ShoreA
- **ABRASION** — $\leq$ 200mm3

STATIC DECAY TIME

from 5000V to 500V	0,009 seconds FTM 101C No. 4046
from 5000V to 50V	0,034 seconds FTM 101C No. 4046

MAT ESD PERFORMANCE

Surface (point to point) resistance	NFPA 99 **IEC 61340-5-1** EOS/ESD-S4.1 - 1990 100V EOS/ESD-S4.1 1990 10V	1 x 10**7 - 1 x 10**9 **5 x 10**6 - 5 x 10**8** 1 x 10**7 - 1 x 10**8 1 x 10**7 - 1 x 10**8
Volume resistance	DIN 51953	5 x 10**6 - 5 x 10**8
Resistance to ground	NFPA 99 **IEC 61340-5-1** EOS/ESD-S4.1 - 1990 100V EOS/ESD-S4.1 - 1990 10V	1 x 10**6 - 1 x 10**9 **5 x 10**6 - 5 x 10**8** 5 x 10**6 - 5 x 10**7 1 x 10**7 - 1 x 10**8
Charge decay	NFPA 99 (da 5000 a 500V)	< 0,05 sec.

157 SURFACE RESISTANCE TO CHEMICALS (according DIN 51958)

CHEMICALS CONCENTRATION	**EXPOSURE PERIOD**		
	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.