

Dualmat™

Static Dissipative Work Surface Material

ACL Staticide, Inc. is proud to introduce Dualmat™. This ESD mat is a static dissipative industrial grade elastomer designed for use on table and other grounded work bench surfaces. Its electrical properties are volume dissipative unlike many of the surface dissipative properties of the competition. This material was developed to conform to the most stringent ESD and lead-free requirements.

Dualmat™ is a chemically cross linked material with different electrical resistances on both surfaces. Because it is inherently cross linked the material will not delaminate and is volume conductive. The layers are permanently dissipative with polymers that which will not lose its electrical properties, not exudate and more importantly will not outgas and contaminate clean room environments. The material is as durable as rigid laminates, and as comfortable and appealing as softer rubber or vinyl mats. Suitable for use with constant monitor systems.

Because of the structure, the material meets both the ANSI/ESD S20.20 and European IEC 61340-5-1 specifications and therefore has outstanding charge dissipation, rapid charge decay, no charge suppression and outstanding low tribogeneration properties. The material will withstand solvents, soldering iron deformation, not curl and have excellent abrasion resistance. The embossed surface will reduce light glare, increase part slip resistance and facilitate cleaning. Since the material is free from halogens, lead, arsenic, barium, heavy metals, phthalate plasticizers, vinyl monomer, asbestos, formaldehyde, antimony, chromium, cadmium and other dangerous volatiles, it may be used in environments where out gassing and contamination is of concern.



Grounding hardware and snaps available.

For lead-free environments, use Green mats or rolls.



ISO 9001:2000
Reg. to: ACL Inc.
Cert. No. A3656

Rolls:	Light Blue	Royal Blue	Dark Gray	Green
24" x 40'	8085BR2440	8285RBR2440	8385DGYR2440	8185GR2440
30" x 40'	8085BR3040	8285RBR3040	8385DGYR3040	8185GR3040
Mats:	Light Blue	Royal Blue	Dark Gray	Green
24" x 36"	8085BM2436	8285RBM2436	8385DGYM2436	8185GM2436
24" x 48"	8085BM2448	8285RBM2448	8385DGYM2448	8185GM2448
24" x 60"	8085BM2460	8285RBM2460	8385DGYM2460	8185GM2460
30" x 60"	8085BM3060	8285RBM3060	8385DGYM3060	8185GM3060
24" x 72"	8085BM2472	8285RBM2472	8385DGYM2472	8185GM2472
30" x 72"	8085BM3072	8285RBM3072	8385DGYM3072	8185GM3072

Dualmat™

Static Dissipative Work Surface Material

Technical Specifications

Electrical properties @ 12% Relative humidity

RTT Resistance between two points

2.1 x 10⁷ ohms @ 10 volts / ANSI/ESD S4.1

1.3 x 10⁷ ohms @ 100 volts / ANSI/ESD S4.1

DIN 51953, IEC-61340-2-3

RTG Resistance between point to ground

6.1 x 10⁷ ohms @ 10 volts / ANSI/ESD S4.1

5.3 x 10⁷ ohms @ 100 volts / ANSI/ESD S4.1

Volume Resistivity

After 48 hours @ 12% RH 4.6 x 10⁷ ohms-cm

Decay time

100 volts to 50 volts per FTM 101C method 4046,
ANSI/ESD S541 Appendix F, EN 100015/DIN 51953

Meets or exceeds ASTM F-150, NFPA-99, ANSI/ESD
STM 7.1, UL-779, EN 100015, DIN 51953, ANSI/ESD
S20.20IEC-61340-5-1

Physical Characteristics

Hardness: 85+/- 5 Shore A per ASTM D-2240

Abrasion Resistance: Tabor abrasion test h-18 wheel
(1000 cycles) 500 gram load. Under .5 grams loss

Surface Texture: Low glare for user comfort

Temperature Resistance: Withstands soldering iron contact

Cleanability: Mild cleaning solution such as ACL Mat &
Table Top Cleaner

Installation: Sharp blade, or scissors

RoHS compliant

Features

Embossed Finish
Reversible (two sided)
.080 inch (2mm) thickness
.05 second decay time
10⁶ - 10⁸ ohms, ohm per cm
RTG, RTT, Vol R
Durable surface
Low out gassing and VOC
Low abrasion
No vinyl monomers, or DOP
UV additives

Benefits

No glare
Easy to clean
Parts will not stick or slide
Black side is ideal for fiber optics
Durable
Non-curling corners remain flat
Rapid, safe static drain
Meets industry electrical specifications
in all humidities
Withstands high temperatures, solder,
flux, and harsh chemicals
Ideal for cleanrooms and other
controlled areas
Environmental, personnel safety and
conformance
Color stability (will not fade)

Uses & Applications

Electronic manufacturing
Clean room
Fiber optics
Defense and military
Explosives
Aviation
Pharmaceutical plants
Computer installation
Hospitals
Chemical processing
Printing

ACL Staticide
Specialists in Static Control

1960 Devon Ave.
Elk Grove Village, IL 60007
Telephone: (847) 981-9212
Fax: (847) 981-9278
website: www.aclstaticide.com

ACL Staticide, Inc. Dualmat™ Warranty: ACL Staticide, Inc. offers an exclusive lifetime warranty on the electrical resistance (10⁷ – 10⁹ ohms) properties of our Dualmat™ table mats. If the electrical properties should fail (when tested to ANSI/ESD S20.20 standards) on any of our table mats during the lifetime of the mat due to manufacturing or physical defects, we will replace the mat free of charge. This warranty does not apply to mats that are abused, improperly used, or cleaned with mat cleaners not tested and approved by ACL Staticide, Inc.