

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:				
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

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Technical Specifications

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)

Electrical properties @ 12% Relative humidity
RTT Resistance between two points 2.1 x 10 ⁷ ohms @ 10 volts / ANSI/ESD S4.1 1.3 x 10 ⁷ ohms @ 100 volts / ANSI/ESD S4.1 DIN 51953, IEC-61340-2-3
RTG Resistance between point to ground 6.1 x 10 ⁷ ohms @ 10 volts / ANSI/ESD S4.1 5.3 x 10 ⁷ ohms @ 100 volts / ANSI/ESD S4.1
Volume Resistivity After 48 hours @ 12% RH 4.6 x 10 ⁷ 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

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

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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.