

LEWISBins+ ESD materials conform to ANSI/ESD S20.20\*1999 requirements for ESD packaging. This standard requires conductive materials surface resistance to be  $<1.0 \times 10^4$  ohms and dissipative materials to be  $>1.0 \times 10^4$  ohms to  $<1.0 \times 10^{11}$  ohms when tested per EOS/ESD S11.11. The materials also conform to the static decay requirement of FTM-101B, Method 4046.1 dissipating a 5,000 volt charge to 0 when grounded in less than 2 seconds. Contact your LEWISBins+ sales representative for more details on other dissipative materials that are available.

### ESD-Safe Materials

Property	Test Method Units	Conductive Material		
		XL	LS	SD SMC
Surface Resistivity	ASTM D257 (ohms/square)	$< 1.0 \times 10^5$	$\geq 1.0 \times 10^9$ $< 1.0 \times 10^{12}$	$\geq 1.0 \times 10^5$ $\leq 5.0 \times 10^9$
Surface Resistance	EOS/ESD S11.11 (ohms)	$< 1.0 \times 10^4$	$\geq 1.0 \times 10^8$ $< 1.0 \times 10^{11}$	$\geq 1.0 \times 10^4$ $\leq 5.0 \times 10^8$
Static Decay	FTM-101B Method 4046.1 (seconds)	$< 2$ seconds	$< 2$ seconds	$< 2$ seconds
Temperature Range	°F	40°F to 225°F	40°F to 225°F	-60°F to 250°F

*Note: At upper end of temperature range intermittent use is recommended.*



**Conductive Material - XL Material** is a thermoplastic polypropylene material based upon carbon black that has a surface resistance of less than  $1.0 \times 10^4$  ohms or surface resistivity of  $< 1.0 \times 10^5$  ohms/square. XL material has a static decay rate from 5,000 volts to 0 of less than 2 seconds. This material has a useful temperature range of 40°F to 225°F, with intermittent use recommended at the higher end of the temperature range. The electrical properties of this material are permanent and unaffected by washing.

**Dissipative Material - LS Material** is a polypropylene material that is on upper end of the dissipative range. The material has a surface resistance greater than or equal to  $1.0 \times 10^8$  ohms, but less than  $1.0 \times 10^{11}$  ohms or surface resistivity greater than or equal to  $1.0 \times 10^9$  ohms/square, but less than  $1.0 \times 10^{12}$  ohms/square. LS material has a static decay rate from 5,000 volts to 0 of less than 2 seconds. This material has a useful temperature range of 40°F to 225°F, with intermittent use recommended at the higher end of the temperature range. Electrical properties are affected by humidity. This material is available on a made-to-order basis only.

**Dissipative Material - SD SMC Material** is a thermoset polyester based material that is on the lower end of the dissipative range. The material has a surface resistance greater than or equal to  $1.0 \times 10^4$ , but less than or equal to  $5.0 \times 10^8$  ohms/square and a surface resistivity greater than or equal to  $1.0 \times 10^5$  ohms/square, but less than or equal to  $5.0 \times 10^9$  ohms/square. This material has a useful temperature range of -60°F to 250°F, is autoclavable and does not melt at high temperatures making it ideal for handling hot parts. The electrical properties of this material are permanent and unaffected by washing.

## SHELF BINS

- Designed to work with 12" and 18" shelving to enhance inventory control and part organization.
- Bins nest when empty to save space.
- Built-in hang lock allows bin to tilt out for full part accessibility. Hopper front optimizes part accessibility.
- Large flat area for adhesive identification and bar code scanning (see page 36).
- Each bin can accommodate up to 3 dividers.
- Optional conductive dividers slide in easily and lock securely to eliminate part migration.



### ESD-Safe Width Dividers

Model	Fits Shelf Bins
DSB-4	SB1204-4, SB1804-4
DSB-6	SB1204-6
DSB-7	SB1804-7
DSB-8	SB1204-8

Available Stocked Material: ● XL Conductive

### ESD-Safe Shelf Bins

Model	Outside Dimensions (in)			Weight (lb)	Carton Quantity
	L	W	H		
<b>12" Shelf Bins</b>					
SB1204-4	12.0	4.3	4.0	0.3	48
SB1204-6	12.0	5.6	4.0	0.5	36
SB1204-8	12.0	8.5	4.0	0.5	24
<b>18" Shelf Bins</b>					
SB1804-4	17.6	4.3	4.0	0.4	36
SB1804-7	17.6	6.6	4.0	0.6	24

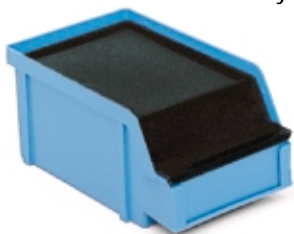
Available Stocked Material: ● XL Conductive





- 8 sizes available (6 optional molded-in dividers).
- Label insert area for easy identification.
- Bins hang on most louvered panels or rails.
- Smooth gravity flow interior optimizes parts accessibility.
- "X" designates molded-in dividers.

**Solid Covers** are available to further protect your parts by creating a Faraday Cage.



### Covers

Fits Model	Solid Covers
PB10	CPB10*
PB20	CPB20
PB22	CPB22*
PB30	CPB30

\* Available on a make-to-order basis. Please call for information.

Available Stocked Material: ● XL Conductive

### ESD-Safe Plastibox® Part Bins

Container Model	Outside Dimensions (in)			Inside Dimensions (in)		Hopper Height (in)	Weight (lb)	Carton Quantity	Flat Label ID Area (in)	
	L	W	H	L	W				W	H
PB10	3.5	4.0	2.0	3.0	3.4	1.1	0.1	24	3.0	0.8
PB10x (with divider)	3.5	4.0	2.0	3.0	3.4	1.1	0.1	24	3.0	0.8
PB20	7.0	4.0	2.9	6.0	3.4	1.6	0.3	24	3.0	1.0
PB20x (with divider)	7.0	4.0	2.9	6.0	3.4	1.6	0.3	24	3.0	1.0
PB22	6.6	8.8	2.9	6.0	8.1	1.6	0.4	12	2.5	7.5
PB22x (with divider)	6.6	8.8	2.9	6.0	8.1	1.6	0.5	12	2.5	7.5
PB30	9.5	5.8	5.0	8.4	5.0	2.6	0.6	12	3.0	1.0
PB30x (with divider)	9.5	5.8	5.0	8.4	5.0	2.6	0.7	12	3.0	1.0
PB31	9.3	8.8	5.0	8.4	8.0	2.5	0.8	8	3.0	1.0
PB31x (with divider)	9.3	8.8	5.0	8.4	8.0	2.5	0.9	8	3.0	1.0
PB40	12.8	8.1	6.0	11.8	7.1	3.1	1.3	12	3.0	1.0
PB41	12.8	11.4	6.0	11.8	10.5	3.1	1.5	12	3.0	1.0
PB41x (with divider)	12.8	11.4	6.0	11.8	10.5	3.1	1.7	12	3.0	1.0
PB50	18.5	11.6	7.1	17.1	10.8	3.8	2.2	6	3.0	1.0

Available Stocked Material: ● XL Conductive

Note: Other ESD-Safe materials are available on a make-to-order basis. Please call for more information.



LPA1818-CON shown with PB20-XL

**Conductive or ESD-Safe Plastibox Containers and Metal Storage Systems** are available in many different container sizes and styles to meet your work-in-process requirements. Organize your work area to efficiently store components, assemblies and circuit boards while protecting them from the damaging effects of static electricity. See pages 30-31 for more information on ESD-Safe Metal Storage Systems. *Note: PB50 is not designed for use on hanging systems.*