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CB/GLOBAL GUIDE/05\_10/E

## CARBON BLACKS



## Carbon Black for Plastics: Global Recommendation Guide



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# Carbon Black for Plastics: Global Recommendation Guide

SEMI-CONDUCTIVE POWER CABLE (SEMICON)							
SEGMENT	SUB-SEGMENT	POLYMER PREPONDERANCE	SURFACE SMOOTHNESS	CONDUCTIVITY	IONIC IMPURITIES	STRIPPABILITY	GRADE FIT
Medium Voltage Cable	Fully-bonded Shield Strippable Shield	PE copolymer PE copolymer	XXXX* XXX	XXXX XX	XXXX XXX	- XXXXX	VULCAN® XC500, VULCAN XC72 VULCAN XC200, VULCAN XC500
High Voltage Cable	Fully-bonded Shield	PE copolymer	XXXXX	XXXX	XXX	-	VULCAN XC500

ELECTROSTATIC DISSIPATIVE (ESD)					
SEGMENT	SUB-SEGMENT	POLYMER PREPONDERANCE	CONDUCTIVITY	DISPERSABILITY	GRADE FIT
Electronics & Electrical	IC Carrier Tapes ESD Films IC Thermoformed Trays ESD Corrugated Boards IC Rigid Trays ESD Boxes	PS > PS/PPO > PC LDPE > LLDPE > EVA PS > PS/PPO PP PPO > PES PP > HDPE	XXXXXX XXXXXX XXXX XXXX XXXX XXX	XXXXXX XXXXXX XXXX XXXX XXX XX	VULCAN XC605, VULCAN XC72 VULCAN XC605, VULCAN XC72 VULCAN XC305, VULCAN XC605, VULCAN XC72 VULCAN XC305, VULCAN XC605, VULCAN XC72 VULCAN XC305, VULCAN XC605, VULCAN XC72 VULCAN XC305
Safety	Containers Fiber/Slit Tape Conveying (Pipe, etc.)	HDPE > PP PP PE > PP	XXXXXX XXXX XXX	XXXX XXX XX	VULCAN XC605, VULCAN XC72 VULCAN XC305, VULCAN XC605, VULCAN XC72 VULCAN XC305, VULCAN XC605, VULCAN XC72
Business Machines	Gears, rods,...	PA > POM > PBT	XXXXXXX	XX	VULCAN XC72

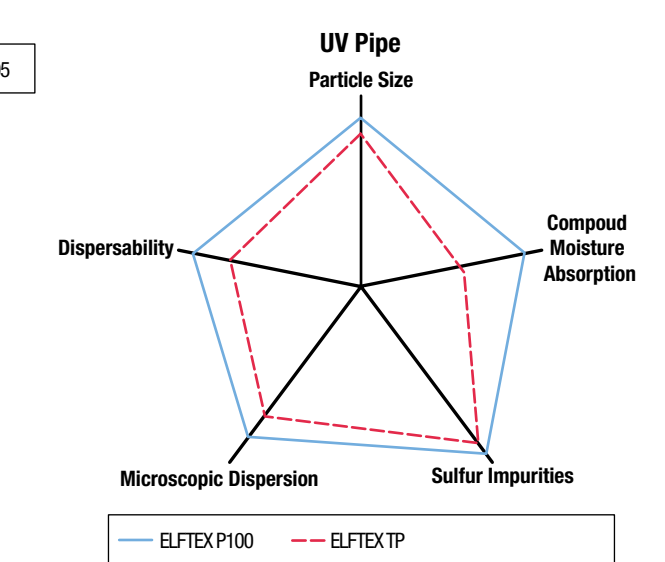
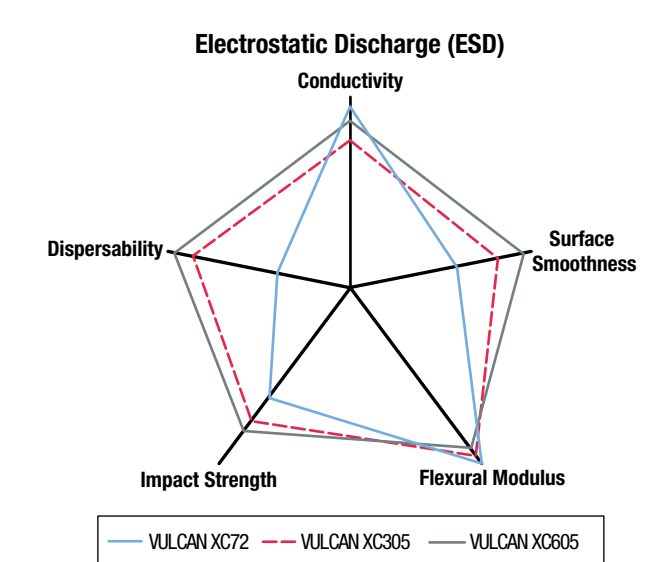
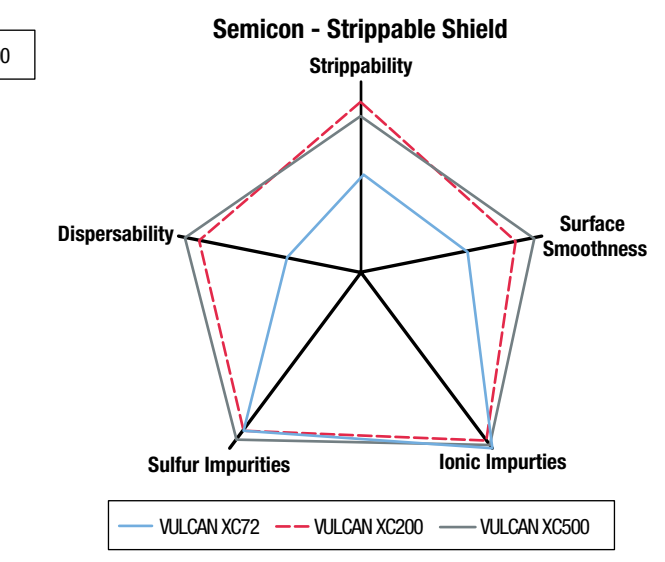
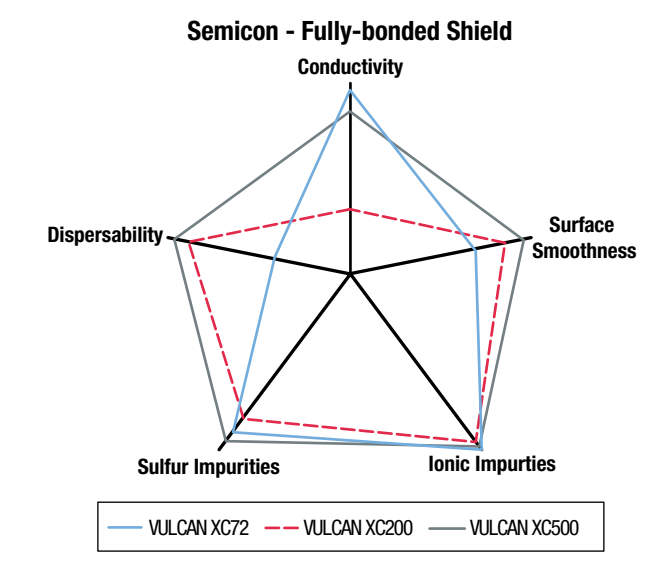
UV-EXTRUSION					
SEGMENT	SUB-SEGMENT	POLYMER PREPONDERANCE	UV STABILITY	MICRODISPERSION	GRADE FIT
Pipe	Regulated - Pressure Pipe Regulated - Irrigation Non-regulated - Drainage, Industrial,...	PE PE PVC > PE > PP	XXX XXX X	XXXX XX X	ELFTEX® P100, ELFTEX TP ELFTEX TP, ELFTEX 570 ELFTEX 570, ELFTEX 430, ELFTEX 460, ELFTEX 120
Telecom Cable Jacketing	Copper Telecom Cable Fiber Optic Cable	PVC > PE PE	XXX XXX	XXX XX	ELFTEX 254, ELFTEX TP, VULCAN 9A32 ELFTEX 254, ELFTEX TP, VULCAN 9A32
Power Cable Jacketing	Medium/High Voltage Cable Low Voltage Cable Conductive Jacket	PE > PVC PVC > PE PE	XX X XX	XX X XX	ELFTEX 254, ELFTEX TP, VULCAN 9A32 ELFTEX 570, ELFTEX 430, ELFTEX 460, ELFTEX 120 VULCAN XC500
Geomembranes		PE	XXXX	XXX	ELFTEX 254, ELFTEX TP, ELFTEX 570, VULCAN 9A32

PLASTIC FILM						
SEGMENT	SUB-SEGMENT	POLYMER PREPONDERANCE	WEATHERING	OPACITY	FILM SMOOTHNESS	GRADE FIT
Packaging	Carrier Bags (15 - 17 µm) Refuse Sacks (25 - 90 µm) Covering Hoods (80 - 120 µm) Industrial Bags (120 - 180 µm)	LDPE > LLDPE > HDPE LDPE > LLDPE > HDPE LDPE > LLDPE > CoPE LDPE > LLDPE > CoPE	- - XX XX	X XX XXX XXX	XXXX XXX XX XX	BLACK PEARLS® 120, BLACK PEARLS 160 BLACK PEARLS 120, BLACK PEARLS 160 BLACK PEARLS 120, BLACK PEARLS 160 BLACK PEARLS 120, BLACK PEARLS 160
Agriculture	Mulch Film (10 - 80 µm) Silage Film (90 - 200 µm) Stretch Wrap (20 - 30 µm)	LDPE > LLDPE > CoPE LDPE > LLDPE > CoPE LDPE > LLDPE > CoPE	XXXX XXXX XXXXXX	XXXX XXXX XXXX	XXXX XXXX XXXXXX	BLACK PEARLS 4040 BLACK PEARLS 4040 BLACK PEARLS 4040

MOLDING					
SEGMENT	SUB-SEGMENT	POLYMER PREPONDERANCE	COLOR STRENGTH	SURFACE APPEARANCE	GRADE FIT
Automotive	Exterior Interior Under the Hood	PP > ABS > PC/ABS > PA ABS > PP > PC/ABS > POM PA > POM > PP	XX XXXX XX	XX XXXX XX	BLACK PEARLS 4840, 800, 900 BLACK PEARLS 4840, 800, 900 ELFTEX TP, ELFTEX 570, VULCAN 9A32
Electronics		ABS blend > PC > POM	XXXX	XXXX	BLACK PEARLS 4840, 800, 900
Household Appliances		ABS blend > PC	XXXX	XXXX	BLACK PEARLS 4840, 800, 900
Food Contact	FDA Other countries	miscellaneous miscellaneous			BLACK PEARLS 4350, BLACK PEARLS 4750 Contact us for advice

SYNTHETIC FIBER					
SEGMENT	SUB-SEGMENT	POLYMER PREPONDERANCE	COLOR STRENGTH	FILTERABILITY	GRADE FIT
Textile Filament Yarn (up to 10 dtex)	Fine (1.0 - 2.5 dtex) Medium (2.5 - 7.0 dtex) Coarse (7 - 10 dtex)	PES > PA > PP > VIS PES > PA > PP PES > PA > PP	XXX XX X	XXXX XXX XX	BLACK PEARLS 4560i, BLACK PEARLS 5560 BLACK PEARLS 4560i/5560, ELFTEX TP, VULCAN 9A32 ELFTEX TP, ELFTEX 570, VULCAN 9A32
Industrial Filament Yarn (3 - 15 dtex)	Safety Belts Ropes/Nets	PES PA > PES	X X	XX XX	BLACK PEARLS 4560i/5560, ELFTEX TP, VULCAN 9A32 BLACK PEARLS 4840
Staple Fibers (up to 300 dtex)	Cotton Type (1.3 - 2.8 dtex) Woollen Type (3.3 - 10 dtex) Carpet Type (10 - 300 dtex)	PES > VIS > PAN > PP PES > PAN > VIS > PP PP > PA > PAN	XXX XX X	XXXX XXX XX	BLACK PEARLS 4560i, BLACK PEARLS 5560 BLACK PEARLS 4560i/5560, ELFTEX TP, VULCAN 9A32 ELFTEX TP, ELFTEX 570, VULCAN 9A32
BCF (bulk continuous fiber - carpet - 8 - 20 dtex)		PA > PP	X	XX	ELFTEX TP, ELFTEX 570, VULCAN 9A32
Monofilaments (20 - 400 dtex)		PP	X	XX	ELFTEX TP, ELFTEX 570, VULCAN 9A32

\* = indicates degree of importance of the performance measures.



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