Mesh Count by Job for Plastisol Screen Printing

The mesh range each maker lists for the whites and colors we stock, sorted by job.

Job	Ink and mesh range (threads per inch)	Maker note
Whites		
White on 100% cotton	Epic Quick White 86-230. XOLB-142 83-230. WM Soft Cotton 86-305. WM Brite 86-300.	WM: Soft Cotton through high mesh gives the softest feel, close to water-base.
White on blends and triblends	Tiger White 86-280. Bolt LC White 86-305. WM Ultimate 86-300. WM Radiant 61-180.	Avient: a lower mesh lays down more ink; a higher mesh gives finer detail.
White on 100% polyester	Athletic Poly White 86-160. Rival Sport LC White 86-160. WM Titan 86-180. PERM-170 86-110.	PERM-170: higher mesh can be used but bleed may result.
Underbase for polyester bleed	WM Brute White (LC) 61-230; WM suggests 110 or coarser as an underlay on 100% polyester.	Cure 250F-270F on 100% polyester (WM).
Colors		
Rio RFU colors, Rio Mix, Epic MX, PC Express, Equalizer	110-305	Avient Product Selection Guide.
Rival Sport colors and Rival Sport Black	86-230	Avient Product Selection Guide.
Epic Matte Black	86-305	Avient Product Selection Guide.
WM LC colors	61-230	WM LC series.
Special jobs		
Stretchable fabric	No more than 110 mesh, thicker deposit, print-flash-print; cure 270F.	WM Plastics LC series tips.
Wet-on-wet	Same ranges as above. Avient rates Epic MX Best, Rio RFU Better, Rival Sport colors not recommended.	Avient Product Selection Guide.

Screen setup

Screen setup item	What the makers list
Mesh tension	Avient lists 25-35 N/cm2 for Tiger White; the QCM bulletins list 25.
Emulsion and off-contact	QCM bulletins: emulsion over mesh 15-20%; off-contact 1/16 inch (2 mm) or greater; standard emulsion.
Squeegee	QCM: 70 durometer, square profile, 10-20% angle. WM: medium to hard at 45 degrees with a sharp blade.

Mesh counts are threads per inch. Pre-stretched aluminum screens in 25 to 355 mesh and our mesh chart: bucketsofink.com/page/screen-printing-mesh-count-chart. Always test: ink, fabric and art change the right mesh. Sources: Avient/Wilflex technical data sheets and Product Selection Guide (2026), Avient QCM PERM170 and XOLB142 product information bulletins, WM Plastics Ink Tech Catalog (NP v42). Temperatures in degrees Fahrenheit. Reference only: the maker's current TDS governs. Every data sheet: bucketsofink.com/page/safety-data-sheets.