

WHY CHOOSE GRAL MULTICOLOUR?

- Coats Gral Multicolour has been injection dyed with up to 6 different colours to give an attractive, varied multicolour effect on the thread
- Use Gral Multicolour thread for eye-catching stitching effects on all kinds of denim wear
- From subtle tone-in-tone to rainbow contrast colours, Gral Multicolour gives that extra special look and has good abrasion resistance properties

MAIN USES:

Denim

Menswear

Jeans

 Various other applications where a special shade effect is desired

LadieswearChildrenswear

PRODUCT RANGE

Art / Tkt	TEX	Ticket	Length	Strength cN	Elongation % Min - Max	Needle Size Metric
1MCF120	21	120	15000m	1420	16 - 22	75 - 90
1MC3040	60	40	3000m	4230	17 - 22	100 - 110
1MC3030	80	30	3000m	5200	17 - 26	130 - 140
1MC3020	135	20	3000m	8360	18 - 24	140 - 160
1MC1010	270	10	1000m	16630	20 - 35	160 - 180

^{*}Other ticket sizes are available upon request.





Coats® Gral™ Multicolour

SHADE RANGE OF 10 POPULAR COLOURS

101MU	104MU	116MU	106MU	109MU	105MU	112MU	107MU	111MU	102MU



THERMAL PROPERTIES

Melts at 250 - 260°C, softens at 220 - 240°C
Shrinkage less than 2.5% @ 150°C

CHEMICAL PROPERTIES

Mineral acids:	Resistant to most mineral acids		
Alkalis:	Essentially unaffected by weak alkalis, but less resistant to stronger alkalis, especially at higher temperatures		
Organic solvents:	Generally unaffected, but soluble in some phenolic compounds		
Bleaching:	Unaffected		
Insects / microorganisms (mildew, rot):	Unaffected		
Laundering / dry cleaning:	Unaffected		
Moisture regain:	0.4%		

FASTNESS PROPERTIES

Washing at 60°C	(ISO 105 C10:2006 C(3))	Grade 4	
Water Fastness	(ISO 105 E01:2010)	Grade 4	
Rub Fastness	(ISO 105 X12:2001)	Grade 4	
Hypochlorite Fastness	(ISO 105 N01:1993)	Grade 4	
Dry Cleaning Fastness	(ISO 105 D01:2010)	Grade 4	
Perspiration Fastness	(ISO 105 E04:2009)	Grade 4	
Artificial Light Fastness	(ISO 105 B02:1994)	Grade 4	





Coats® Gral™ Multicolour

EXPERT REAL WORLD SUPPORT

The final cost of any thread also includes hidden costs, fuelled by the methods and tools applied to it. Our experts know exactly how to reduce those costs, save time and increase productivity.



Seamworks

Install our Seamworks software to accurately calculate costs prior to production, putting an end to the risk of over or under ordering materials, and incurring unnecessary extra costs. The Seamworks tool is provided with installation, training and ongoing support included.



One to One Visits

There's no need to come to us, our experts will travel to your site. In person, online or via the phone, our trained consultants deal with the kind of issues any busy factory may face, providing a solution for today and a blueprint for future efficiency.



Training and Presentations

From thread selection to stitch formation, the use of colour to solutions for common production issues, we take the learning gathered through years of hands on experience and present it in the form of high impact seminars, workshops and presentations.



Embroidery Service Centre

Our Embroidery Service Centre makes embroidering a design much easier, increasing productivity at the same time as enhancing the design itself. Email the design and any problematic issues to us and our technicians will email the improved design right back.

To drive your hidden costs down, talk to Coats. From thread audits in pre-production to the latest technological bulletins, we'll provide support that achieves measurable results.

For more information, talk to your Coats representative today or visit coats.com

OTHER PRODUCTS IN THE GRAL RANGE

To complement the Gral range, we also have a selection of specialist Gral threads. Each of these combines the superior properties of the Gral product with additional benefits specific to the end use.

Product Name	Description
Gral for Apparel	Lubricated continuous filament polyester for neat and attractive stitching.
Gral AS	Engineered for use as needle thread to prevent down migration during the sewing and lifetime of padded down jackets.
Gral AST Anti-static	Features a metallic conductive component which detracts electrical charge to prevent static build-up.
Gral AWF (Apparel Sizes)	Free of perfluorinated compounds (PFCs), best anti-wick thread choice for no-compromise, premium water-resistant outdoor wear and rainwear.
Gral AWF (Coarse Sizes)	Free of perfluorinated compounds (PFCs), best anti-wick thread for no-compromise, water-resistant outdoor footwear and accessories.
Gral for Apparel	Lubricated continuous filament polyester for neat and attractive stitching.
Gral Protect	Sewing thread treated to give the finished thread anti-microbial / anti-fungal properties.

Special use Gral products are typically available across a select range of ticket sizes and technical information will in some cases vary from the above table.



Since conditions and applications vary considerably in the use of a product, the customer and/or user should assure themselves that the product meets end customer requirements and is suitable for the intended end use. Coats accepts no liability for unsuitable or improper use or application of products. Information provided is based on current averages and should be taken only as indicative. Coats accepts no liability for the preciseness and correctness of the information provided. Product information sheets are updated for time to time, please be sure you are referring to the most recent publication. Coats supports customers with advice on individual applications on request; if you have any questions or concerns, please contact us. © Copyright reserved 2018

