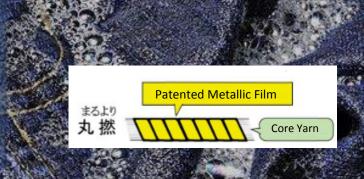


Suncoco Heavy Duty Metallic thread a specially designed to withstand denim washing and hash post processing. This collection of metallic thread is made with a patented metallic film, which ensures the shine and color of the thread remains the same after washing. It is premium quality high tenacity polyester filament core which makes it suitable for both embroidery and sewing applications. This leading development is one of the many efforts taken by Suncoco to demonstrate its commitment to providing the industry with metallic thread for every washing and post processing requirement.



### **Product Information**

Composition	100% Polyester
Yarn type	Metallic thread (round type)
Color in stock	28 colours (DTM available)



Heavy Duty Metallic thread is Oeko-Tex Standard 100 Class 1 certified suitable for use for infants.

### **Product Range**

Usage	Tex	Ticket	Denier	Ply				
Embroidery/ sewing	27	140	243	1 (603)				
Sewing	54	55.5	486	2 (604)				
Sewing	81	37	729	3 (606)				
Sewing	108	27	972	4 (608)				
Sewing	135	22	1215	5 (204)				
Sewing	162	18.5	1458	6 (T-22)				
* Multi-ply/ Custom thickness available with MOQ								

**Technical Recommendation Punching Density** 0.3 mm ~ 0.4 mm Needle Size DBx7ST # 10 **Running Speed** 600 tpm - 800 tpm \* Fastness properties please refer to page 4 for lab test



洗濯サンプル WASHING SAMPLE





@ Suncoco



# What does chemical washing do to metallic thread?



Aluminum reacting with alkaline solution

Most metallic thread available on the market is made with <u>silver or aluminum metallic film</u>. Aluminum is the most popular and common option, due to its low price point. However, both types are not suitable for chemical washing.

Silver reacts with Sulphur, bleach and other oxidants causing it to corrode and tarnish rapidly. Aluminum breaks down when exposed to alkaline or acidic substances. This makes them unideal to be used on garments which needs to undergo post processing washing. It is particularly the case for denim wash, where acidic enzyme, bleach, and other alkaline or acidic agent is used.

## How is Suncoco Heavy Duty Metallic thread different?

Suncoco Heavy Duty metallic thread <u>uses a special patented metallic film wrapped around a polyester core</u>. This patented metallic film is designed to withstand alkaline or acidic washing. This makes sure the shine of the metallic film remains after chemical washing.

(ie. The metal doesn't corrode or break down when exposed to alkaline or acidic agents )

Please refer to diagrams on the right for pictorial comparison.



Regular metallic thread with silver plated metallic film, after dipping in household bleach for 5 minutes. The portion which is bleached has lost all the shine and color, only the core yarn is showing.



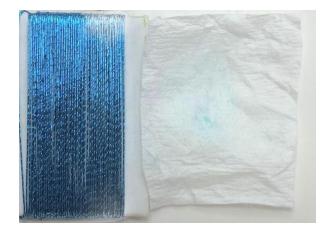
Suncoco Heavy Duty thread with patented metallic film, after dipping in household bleach for 5 minutes. The shine and color remains the same.











This is <u>not</u> a Suncoco product. This sample belongs to a catalog taken from an exhibition from a "low cost option" competitor. A piece of paper is used to rub against this color sample. This sample has an incredibly low color fastness against rubbing.

It is shown here to demonstrate how a metallic thread will look when the color layer is rubbed off exposing the raw metallic layer.



Suncoco Heavy Duty Metallic thread is Oeko-Tex Standard 100 Class 1 certified suitable for use for infants.

The most common metallic thread is colored using resin. It is also the most popular due to its comparatively low cost. It gets its color from laying a pigment layer on top of metallic film, which at its raw state is silver color. For example, a yellow pigment is lay on top of raw metallic film to make the color Gold. This is the most traditional coloring method for metallic thread.

However, this resin layer can be damaged under high temperature or during chemical wash. When damaged this color layer might rub off and expose the raw metallic film below, causing discoloration.

## How is Suncoco Heavy Duty Metallic thread different?

Suncoco Heavy Duty metallic thread <u>uses a special patented metallic film</u> that is dyed at high temperature <u>using disperse dying method</u>. After twisting, the yarn is dyed at 130° C making it highly color fast.

This property makes Heavy Duty Metallic thread highly versatile.

- ✓ High color fastness
- Migh temperature post processing
- Garment dye (natural fiber dying)
- ✓ Custom color with low MOQ



Suncoco Heavy Duty metallic thread is a dyed thread. Hence both the core yarn and metallic film are the same color.









# Washing Lab test

This lab test demonstrates washing performance of Silver , Gold, and colored option of Suncoco Heavy Duty Metallic thread.

SL 6149 is the sample used of silver SL 6152 is the sample used for gold SL 6163 is the sample used for other colors.

## **Fastness Properties**

	Testing	Rating		
	Method	Silver	Gold	Color
Artificial light fastness	JIS L 0842	4	>4	>4
Washing	JIS L 0844	5	5	5
Rub fastness (dry)	JIS L 0849	5	4	4 – 5
Rub fastness (wet)	JIS L 0849	5	4- 5	4 - 5
Dry cleaning	JIS L 0846	5	5	5
Hot heating	JIS L 0845	5	4- 5	5
Dry heating	JIS L 0879	5	4 -5	5

		具は供試々料に対する 【を証明するものでは				)	品質	[検査	報告	書	7	3	受 付 億 行	平成24年5月24日平成24年5月29日
$\neg$	and the latest desirable d	試驗方法/牛地			2 SL6152	3 \$16163	4	5	6	7	8		発 行	No. KT- 12-005205
-	耐光(級)	JIS L 0842	変	4	4以上	4以上	1.76364	Berne					76 11	NO. 101 12 000200
ı	洗濯(級)	JIS L 0844 A- 2 号	发	5	5	5	Mash	Mach				納	会社名	
121	洗濯(級)	JIS L 0844	変	5	4	4-5	X mass					入	分類コート	
	市販合成洗剤使用	(A- 2号準用)										先	商品コート	
3	100000000000000000000000000000000000000	JIS L 0848	変				•						納入者3一十	<del></del>
3	汗 (級)	(酸・アルカリ)	汚	•				•				納	会社名	Complete
X	摩擦(級)	JIS L 0849	乾	5	4	4-5	68 x 5		<b>*********</b>				云红石	
* L	Na abs (NBX)	Ⅱ形	湿	5	4-5	4-5	Kumba					入	ment divisit	
5	水(級)	JIS L 0846	変										所在地	(mmx )
	200.00000	(Manage Control of Control	汚		***************************************							者	担当者	(TEL)
, [	ト <sup>'</sup> ライクリーニンク' (級)	JIS L 0860 B-2祛(石油系溶剤)	変	5	5 4-5	5	Diam C	East ling				-	担当有 RTB	
-	色泣き(級)	大丸法	79-1	9	4-0							品	品番	14.76
			変		800000000000000000000000000000000000000							名	100 100	3
	Accessed to		変	5	4-5	5	Yelet H	ecetalas.						
	熱湯(級)	JIS L 0845	汚	5	4-5	5			\$					
- [	新教机理(部)	JIS L 0879 B法	変	5	4-5	5	1000000							
_			汚	5	3	4-5	1777 1	1				所		ては、新付白布:綿・毛
		"七片" 厚生省令第34号	513									1	転燃処埋に	ついては、添付白布:ポリエステルで試験実施
	乳幼児 (A- 寸法変化率	A0)	たて											
	(%)		12											
-		カケン法	級									1		
9	パイル保持力	24.7.4.104	回											
1	毛羽付着(級)	セロテープ法												
	試験項目	試験方	法	生地No.	たて	よこ 1	<b>以</b> 聚項目	試験方	法 生地	a たて	よこ	見		
	寸法変化率											1		
١,	(%)			83333 B					3000					结果の(+)は伸び、(-)は縮みを示す。
		JIS L 1096 A法(5へ'#)		1000000		- 4	複製強さ(kPa)	JIS L 1096	A徒 ·····			4	可依淡化學	紀末の(十月4年の、(一月4個かどかり。
E	引裂強さ (N)	JIS L 109 D法	О									1	適用規格	
. 1	滑脱抵抗力	JIS L 109	6				繊維鑑別	維鑑別 JIS L 1030				判		99999999999999999999999999999
8	(mm)	B法 荷重	N									定	生地模貨	合格 ( - 色) 不合格 ( - 色
- 1	スナッグ(級)	JIS L 1058 A法										走	添付白布	綿 • 絹
-	ピリング(級)	JIS L 1076 A法	時报	1 00000									カケニ	/
	摩耗強さ	JIS L 109	6									検	一般則	財団法人 同語 一人自名
_	(回)	E法(マーチンデール法)										查		カケンテストセンター ®
	1 SL6149		3		4	5		6	7	. 8	3	機		(200万) 三层(1
Life	-N K	AKEN	AKE	N K	AKEN							関		京都検査所
地本	- 19		ME.	M								10	0	(60.)
40	1	h .		1	D .	- 1				- 1		処	(套)	(建設)
	463	50			100							理	Start 1	V# 2 7 1





# HEAVY DUTY Suncoco

# **Denim Washing Results**



It is an example or post processing done near the hip area. The fabric shows clear fading, while the pocket design using Suncoco Heavy Duty Metallic thread in the color gold shows even shine and color.



This is a demonstration of how Suncoco Heavy Duty Metallic thread withstands <u>different levels of bleaching</u>. The denim fabric shows various fading intensity while Suncoco Heavy Duty Metallic thread in brass color retains the same shade and shine.





# HEAVY DUTY Suncoco

# **Denim Washing Results**



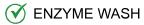
**Before Washing** 



**S** BLEACH WASH



**Ø** BLAST WASH











### METALLIC THREAD EXPERT

Suncoco has been servicing the garment industry since 1983, our niche is metallic thread. Throughout history, metallic thread has been used as a symbol of luxury. It adds value to your design allowing for a much higher product markup. For that reason, Suncoco commits ourselves in providing premium quality metallic thread, the justify the definition of luxury.

Our understanding of materials help your garment achieve lasting beauty and shine.

Our commitment in purity of metals allow for consistency between production lots and product performance.

Our innovation allow designers to use metallic thread in all desired designs and application.

Let us be your go to supplier for your metallic thread needs.













Sam Lung Products Limited

2111 – 2118 New Tech Plaza 34 Tai Yau St. Sanpokong Kowloon Hong Kong Tel: +852 2328-8686 Whatsapp: +852 91336588 Fax: +852 23523884



