

Cored Wire Capabilities



Diameters		Standard Flux Percentage					Packaging*						
in.	mm	0.8-1.2	1.7-2.2	2.7-3.2	3.3-3.7	3.7-4.3	4.3-4.7	100g	1/4 lb. (113g)	1 lb. (454g)	5 lb. (2,268g)	20 lb. (9,072g)	
0.006	0.15	Alloy Options: SAC305, SAC387, Sn96/Ag4, Sn96.5/Ag3.5, Sn96.3/Ag3.7					✓						
0.008	0.20	Alloy Options: SAC305, SAC387, Sn96/Ag4, Sn96.5/Ag3.5, Sn96.3/Ag3.7						✓					
0.010	0.25							✓					
0.015	0.38							✓					
0.020	0.51									✓			
0.025	0.64									✓			
0.032	0.81									✓			
0.040	1.02									✓	✓		
0.050	1.27									✓	✓		
0.062	1.57									✓	✓		
0.110	2.80									✓	✓	✓	
0.125	3.18									✓	✓	✓	
>0.125	>3.18	Contact PLM to discuss								Packaged in pails			

Low Flux %
Medium Flux %
High Flux %

*Applies to all alloy groups

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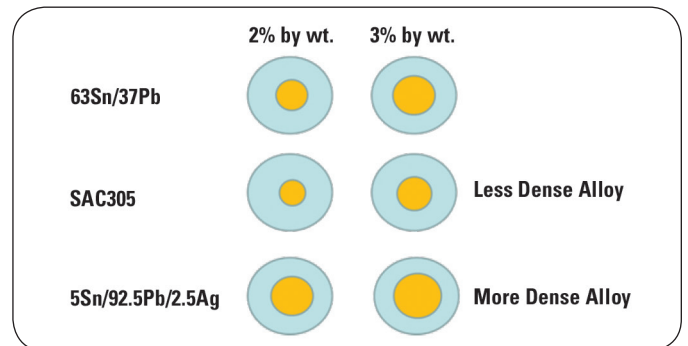
Shelf Life

	Warrantied	Practical*
Tin-Lead Alloys	3 years from DOM	Indefinite
Lead-Free Alloys	3 years from DOM	Indefinite
>85% High-Lead	2 years from DOM	Indefinite

*When stored at less than 40°C and less than 80% RH

When stored in a cool, dry environment, there is no reason that Indium Corporation's cored wire cannot retain its intended soldering properties for many years. The main causes of degraded cored wire reflow performance are the buildup of a thick oxide layer on the surface of the wire, caused by prolonged exposure to higher-than-normal temperature and humidity conditions, or the buildup of lead carbonate on high-lead (>85%) alloy cored wire shipped or stored under very high humidity conditions.

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Packaging Notes:

High-tin alloys will allow only 4 lbs. per 5 lb. spool (1,814g per 2,268g spool)
 High-tin alloys will allow only 18 lbs. per 20 lb. spool (8,165g per 9,072g spool)
 Standard packaging for 1/4 lb. (113g), 1 lb. (454g), 4 lb. (1,814g), and 5 lb. (2,268g) is 10 spools per box
 20 lb. (9,072g) spools = 40 lbs. (18,144g) per box (2 spools)
 18 lb. (8,165g) spools = 36 lbs. (16,329g) per box (2 spools)
 3/4" (19mm) hole for all sized spools
 Green spools = lead-free
 Black spools = lead-containing

Alloy Notes:

Maximum bismuth content 14%
 Maximum antimony content 8.5%
 Maximum silver content 5%
 Maximum indium content 20%
 Maximum copper content 3%
 No Zinc
 No Cadmium
 No Gold

3% flux max., min. diameter: 0.015" (0.38mm)

Cored Wire Capabilities



Flux Number	J-STD-004	J-STD-004B	QQ-S-571f	Halogen Content	JIETA ET-7304 Halogen-Free	Residue	Residue Removal	Preferred Alloys	Application/Comments
No-Clean									
Core 230-RC	RELO	REL1	N/A	>1,500ppm as Br	No	Light Amber	NC, So, Sa	SnPb, Pb-Free	Extremely low spatter, excellent for robotic soldering, general purpose electronics soldering, REACH-compliant
CW-807	ROLO	ROLO	"RMA"	<500ppm	Yes	Colorless	NC, So, Sa	SnPb, Pb-Free	General purpose electronics soldering, REACH-compliant
CW-807-M	ROLO	ROM1	"RMA"	<1,500ppm	Yes	Colorless	NC, So, Sa	SnPb, Pb-Free	Hard-to-solder, general purpose electronics applications
CW-807-H	ROLO	ROLO	"RMA"	<500ppm	Yes	Light Amber	NC, So, Sa	High-Pb Containing	High-temperature, mildly active, modified rosin for high-lead containing alloys
CW-808	RELO	RELO	"RMA"	<500ppm	Yes	Clear	NC, So, Sa	SnPb, Pb-Free	Halogen-free version of Core 230-RC, not as active as CW-807
CW-501	RELO	REL1	N/A	>1,500ppm as Br	No	Colorless	NC, So, Sa	Pb-Free	Higher activity, modified rosin core for electronics
CW-802	ROLO	ROLO	"RMA"	<50ppm	Yes	Colorless	NC, So, Sa	SnPb, Pb-Free	No halogen added, low activity, no-clean
CW-102	ROLO	ROLO	"R"	<50ppm	Yes	Light Amber	NC, So, Sa	SnPb, Pb-Free	Military type "R" for legacy applications, very low activity
Core 92	ROLO	ROLO	"RMA"	<50ppm	Yes	Light Amber	NC, So, Sa	SnPb	Low activity, RMA based on SMQ92J paste technology
Core 230	ROL1	ROL1	N/A	>1,500ppm as Br	No	Dark Amber	NC, So, Sa	Pb-Free	Higher activity, rosin core for electronics
Activated Flux-Cored Wire									
CW-201	ROM1	ROM1	"RA"	<0.5%	No	Light Amber	So, Sa, NCH	SnPb	Electrical application, will solder copper, brass, nickel, etc.
CW-207	ROM1	ROM1	"RA"	<0.5%	No	Colorless	So, Sa, NCH	Pb-Free	Electrical application, will solder oxidized copper, brass, nickel, etc.
CW-209	ROM1	ROM1	"RA"	<1.0%	No	Colorless	So, Sa, NCH	SnPb, Pb-Free	Electrical application, will solder oxidized copper, oxidized brass, nickel, etc.
CW-219	ROM1	ROM1	"RA"	<1.0%	No	Colorless	So, Sa, NCH	SnPb, Pb-Free	Exact same formula as CW-217 with twice as much halogen
Water-Soluble									
CW-301	ORH1	ORH1	"OR"	~3.0%	No	Amber	Water	SnPb, Pb-Free	Water-washed electronics applications
CW-305	ORM0	ORH0	"OR"	<500ppm	Yes	Amber	Water	SnPb, Pb-Free	Next generation halogen-free water-wash, exhibits almost no corrosivity
CW-901	N/A	N/A	"IA"	>3.0%	No	White	Water/Neutralizer	SnPb, Pb-Free	Inorganic acid, water-wash flux for stainless steel
Aluminum Applications									
CW-211									Silver-based solder for direct aluminum soldering
CW-908									Specifically designed for soldering to aluminum and aluminum alloys; not suitable for electrical or electronics applications

Key: NC=No-Clean | So=Solvent | Sa=Saponification | NCH=No-clean for non-sensitive non-electronic applications

Primary Formulas

Diameter	0.032"	0.025"	0.020"	0.015"	0.010"
Cross-section (sq. in.)	0.000804198"	0.000490844"	0.00031414"	0.000176704"	0.000078535"
Ft./lb. 63/37	377	618	966	1,716	3,864
Ft./lb. SAC305	428	702	1,097	1,948	4,388

Second Push

In Scale-Up

Sample Policy

FREE SAMPLES:

Standard SnPb and Pb-free alloys with a diameter **greater than** 0.015" (0.38mm).

- For 0.015" (0.38mm), ask Robert McKerrow*, we may have some in stock if they are preferred products from our distributors.
- These are alloys that would fall under the first two blocks of the CMD Cored Wire pricing guidelines.
- Please keep the sample weight as small as possible. A quarter pound should be the starting weight. For example, one pound of 0.032" SAC305 wire is equal to ~300ft. This is likely much more than the requesting company requires for testing.

PAID SAMPLES (\$150):

Standard SnPb and Pb-free alloys with a diameter **less than or equal to** 0.015" (0.38mm).**

- Cored wire containing greater than 85% lead.
- Cored wire that falls under "All Other Alloys" on the pricing sheet.
- Cored wire containing indium with a diameter less than 0.020" (0.51mm) or a flux percentage greater than 3%.
 - For diameters less than 0.020" (0.51mm), contact Robert McKerrow.*

* rmckerrow@indium.com (315.240.6091)

** Diameters less than 0.015" (0.38mm) take a considerable amount of time to produce because the length by weight is much longer than that of larger diameters. For this reason, we must charge a small sample fee. A sample of wire with a diameter less than 0.015" (0.38mm) should be no more than a quarter pound unless approved by the Product Manager.