

## Product Data Sheet

# Ultra-Clear Series Flux-Cored Wire

### Features

- Made with *ultra-clear* modified rosins
- Contains no BFRs (brominated fire retardants)
- Contains no REACH SVHCs (substances of very high concern)
- RoHS compliant core fluxes
- Full range of activity levels, including mildly-activated, halogen-free
- Exceptional heat stability
- Compatible with tin/lead, Pb-Free, and high lead-containing alloys
- Low smoking
- Mild odor

### Introduction

Indium Corporation *Ultra-Clear* series of flux-cored wire combines the latest in tin/lead and Pb-Free flux technology, satisfying the most recent requirements for no-clean RoHS and REACH compliant materials.

**CW-802** is the most mildly activated of the series and meets all industry-wide current halogen-free and halide-free requirements.

**CW-807** contains a small amount of halogen and provides superior reliability on even the most sensitive electronic assemblies. CW-807 is an industry “workhorse” product, meeting the new requirements of IPC J-709 for halogen-free assembly.

**CW-207** has activity comparable to an activated rosin flux and is recommended primarily for electrical or less sensitive electronic applications. The flux residue left after soldering is non-corrosive and non-conductive.

**CW-209** has twice the level of activator of the CW-207 and is ideal for hard-to-solder electrical applications and industrial applications. The flux residue left after soldering is non-corrosive and non-conductive.

	CW-802	CW-807	CW-207	CW-209
IPC J-STD-004a Classification	ROL0	ROL1	ROM1	ROM1
Meets (obsolete) QQ-S-571f	RMA	RMA	RA	RA
Halogen Content	<300ppm	<800ppm	<0.50%	<1.0%
Silver Chromate Halide Test	Pass	Pass	Fail	Fail
Copper Mirror: IPC J-STD-004a JIS Z 3197	Pass N/A	Pass Pass	Pass N/A	Pass N/A
Corrosion: IPC J-STD-004a JIS Z 3197	Pass N/A	Pass Pass	Pass N/A	Pass N/A
Color	Clear	Clear	Clear	Clear
Odor	Mild	Mild	Mild	Mild
Recommended Flux %	2.0	2.0	3.0	3.0
Compatible Alloys*	Alloys with a liquidus from 170°-330°C, including Sn63/Pb37, SAC305, and Sn5/Pb92.5/Ag2.5			

\* For lower melting point alloys use CW-809

Compatible Metals to Solder	CW-802	CW-807	CW-207	CW-209
Solder Coat	X	X	X	X
Gold	X	X	X	X
Tin	X	X	X	X
Silver	X	X	X	X
OSP Copper	X	X	X	X
Silver Thick Film	X	X	NA	NA
Very Thin Gold Over Nickel		X	X	X
Oxidized Copper		X	X	X
Nickel			X	X
Clean Brass			X	X
Oxidized Brass				X
Bronze				X

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## Ultra-Clear Series Flux-Cored Wire

### Commonly Available Diameters and Packaging

Diameter	Spool Weight	Length	
		Sn63/Pb37	SAC305
0.010" ± 0.002"	1/4lb	966ft	1097ft
0.015" ± 0.002"	1/4lb	429ft	487ft
0.020" ± 0.002"	1lb	966ft	1097ft
0.025" ± 0.002"	1lb	618ft	702ft
0.032" ± 0.002"	1lb	377ft	428ft
0.040" ± 0.002"	1lb	242ft	274ft
0.062" ± 0.002"	1lb	101ft	114ft



#### "No Tangle" Spools

Indium Corporation brings level winding for automated feed to the next level.

### Surface Insulation Resistance

CW-807 85C/85RH	24 hrs	96 hrs	168 hrs
Control	2.35E+09	2.45E+09	1.39E+09
Hand Soldered	2.06E+09	1.51E+09	1.59E+09
35% solution pattern up	5.45E+08	6.41E+08	6.62E+08
35% solution pattern down	5.08E+09	2.79E+09	2.70E+09

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products described which are sold subject exclusively to written warranties and limitations thereon included in product packaging and invoices.

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