

# SILVALOY™ Copper Phosphorous Alloys



**SILVALOY™** Copper Phosphorous alloys are used extensively for joining copper to copper, especially refrigeration and air conditioning tubing and copper electrical conductors. They may also be used on brass and bronze. These alloys are self-fluxing when brazing copper to copper joints, but flux is recommended on large work and is necessary on brass and bronze. Copper Phosphorous alloys should NOT be used on ferrous or nickel alloys.

**SILVALOY™** Copper Phosphorous alloys are available in a variety of compositions to offer a full range of flow and gap-filling characteristics, from the free flow of Silvaloy 0 to the excellent gap-filling qualities of Silvaloy 15.

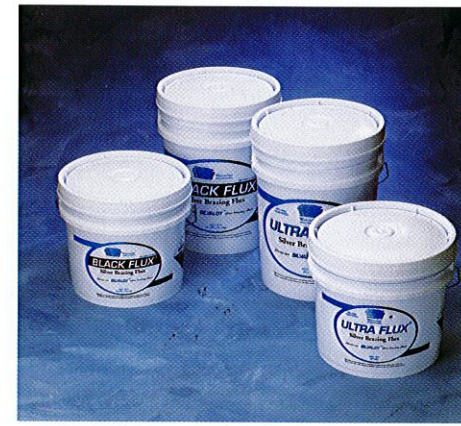
These alloys are available in coiled or spooled wire; round, flat and square rods, ring and many specialty preform shapes.

**SILVALOY™ 15** is available in strip form and is widely recognized as the industry standard for this type of material.

Silvaloy™ Copper Phosphorous Alloys - Specifications and Properties

Silvaloy™	Chemical Composition			Melting Range			AWS Spec. A5.8 Class
	Silver Ag%	Phos. P%	Copper Cu%	Solidus	Flow Point	Liquidus	
Silvaloy 0	—	7.25	Balance	1310° F	1350° F	1460° F	BCup-2
Silvaloy OM	—	6.8	Balance	1310° F	1350° F	1470° F	—
Silvaloy 0-LP	—	6.2	Balance	1310° F	1350° F	1590° F	—
Silvaloy 0-HP	—	8	Balance	1310° F	1350° F	1420° F	—
Silvaloy 1	1	6	Balance	1190° F	1325° F	1495° F	—
Silvaloy 2	2	7	Balance	1190° F	1300° F	1450° F	BCup-6
Silvaloy 2M	2	6.5	Balance	1190° F	1350° F	1460° F	—
Silvaloy 5	5	6	Balance	1190° F	1325° F	1495° F	BCup-3
Silvaloy 5F	5	6.75	Balance	1190° F	1300° F	1420° F	BCup-7
Silvaloy 6	6	6	Balance	1190° F	1325° F	1480° F	—
Silvaloy 6F	6	7.25	Balance	1190° F	1275° F	1325° F	BCup-4
Silvaloy 15	15	5	Balance	1190° F	1300° F	1475° F	BCup-5
Silvaloy 18M	18	6.25	Balance	1190° F	1220° F	1220° F	—

800-225-2130 www.silvaloy.com



## General Purpose Soldering Flux

For use with all Silvabrite solders, Wolverine common solders, or other solders whose liquidus temperatures are less than 700 F. Not recommended for aluminum, magnesium, titanium or electronic applications.

Available in liquid and paste forms. Liquid available in 4 oz, 16 oz and 32 oz sizes. Paste available in 2 oz, 4 oz brush cap, and 1 lb sizes.

## Silvabrite 100® Water Soluble Flux

An excellent match with Silvabrite 100®, as well other lead-free and low temperature solders. Non-corrosive and meets the requirements of ASTM B813.

Available as paste in 4 oz, 8 oz and 16 oz sizes.

## ULTRA FLUX®

Premium grade general application silver brazing flux. For use on all metals except aluminum, magnesium and titanium. Fully molten at 1100 F, (593°C) effective to 1600 F. Like all Wolverine Fluxes, Ultra Flux® is manufactured to the highest quality standards to assure consistently outstanding performance.

## BLACK FLUX

Engineered for brazing at high temperatures, fully effective for temperatures up to 1800 F. Recommended especially for joining refractory metals, stainless steel and wherever higher temperatures or extended heating cycles are encountered.

Ultra and Black Flux available as paste in 1/2 lb, 1 lb, 5 lb, 30 lb and 65 lb containers. Ultra also available in 1/4 lb and 7 oz brush cap containers.

## DRY FLUX

Wolverine's Ultra Flux in powder form. Allows the user to customize the flux's solvent and viscosity characteristics. Available in 1 lb and 25 lb containers.

## ULTRA FLUX-D

Wolverine's Ultra Flux specially formulated for use in automatic flux dispensing systems. Designed to assure smooth flow and trouble-free dispensing. Available in customer-specified dispensers.

## OTHER WOLVERINE BRAZING FLUXES

Beyond the standard fluxes listed here, Wolverine offers a wide range of special-application brazing fluxes. Please contact your Wolverine technical sales representative for assistance in identifying the best Wolverine flux for your application.



Wolverine Flux Reference and Specification Chart

Product	AWS A5.8	Federal Spec QQ-B-650	SAE Aeronautics Materials Spec
Wolverine Ultra Flux®	AWS FB3-A	Fed. Spec O-F-499 Type B	AMS 3410
Wolverine Black Flux	AWS FB3-C	Fed. Spec O-F-499 Type B	AMS 3411

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