



T H E H A R R I S P R O D U C T S G R O U P
A L I N C O L N E L E C T R I C C O M P A N Y
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TECHNICAL SPECIFICATION SHEET

ISO 9002
 Cert. No. 31598

HARRIS 95/5 LEAD FREE SOLDER

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NOMINAL SOLDER COMPOSITION:

Tin	Balance
Antimony	4.5-5.5%

PHYSICAL PROPERTIES: Mechanical properties of bulk solder

Solidus	452°F(233°C)	Electrical Resistivity	145 n Ω·m at 77 °F (25°C)
Color	Gray Silver	Liquidus	464°F(240°C)
Hardness	15HB	Density	8.52 g/cm ³
Shear Strength	11,100 psi (Cu to Cu)	Tensile Strength	14,200 psi (Cu to Cu)
Electrical Conductivity	11.9% IACS at 68°F (20°C)	Elongation in 4"	38%

SOLDERING PROPERTIES:

The 95/5 tin-antimony solder is useful for applications where moderately elevated temperature is a factor. It has a higher electrical conductivity and is recommended where lead contamination must be avoided. The tin-antimony solders are not recommended for use on brass.

AVAILABLE FORMS:

Standard wire diameters
 Preformed Rings

SPECIFICATION COMPLIANCE:

QQ-S571E with exception to QPL para. 3.1
 ASTM B32, Class Sb-5

RECOMMENDED FLUX:

Bridgit Water Soluble Paste Flux, Stay Clean Paste Flux
 Stay Clean Liquid Flux (used with 4"or larger copper tubing also stainless steels)

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WARNING: PROTECT yourself and others. Read and understand this information.

FUMES AND GASES can be hazardous to your health.

ARC RAYS can injure eyes and burn skin.

ELECTRIC SHOCK can KILL.

- Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDS), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1, *Safety in Welding, Cutting, and Allied Processes*, published by the American Welding Society, 550 N.W. LeJeune Road, Miami, Florida 33126; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402.

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