



TECHNICAL INFORMATION SHEET

HARRIS NAVAL BRONZE

NOMINAL CHEMICAL COMPOSITION%:

Tin	0.25 – 1.00
Copper	57.0 – 61.0
Zinc	Remainder
Lead	0.05 maximum
Aluminum	0.01 maximum
Others(total)	0.50 maximum

DESCRIPTION:

The Harris Naval Bronze brazing rod is a copper- zinc-tin alloy developed primarily to braze weld steel, cast iron and malleable iron. The addition of approximately 1% tin to this alloy, improves strength and corrosion resistance. Harris Naval Bronze has a low melt temperature of 1625F (885C), which allows it to be used to also braze weld on copper, brass, bronze. Brazing with RBCuZn-A overheating should be avoided. Prolonged overheating can entrap zinc vapors causing porosity.

TYPICAL PHYSICAL PROPERTIES:

Solidus	1630°F (888°C)
Liquidus	1650°F (910°C)
Brazing Range	1670°F- 1750°F (910°C -955°C)

AVAILABLE FORMS:

Flux coated and braze rods.

CORROSION RESISTANCE:

Corrosion resistance is similar to most high zinc brass alloys. Care should be taken on service conditions where water immersion is involved as dezincification is a potential issue.

RECOMMENDED FLUX:

Rods are available bare or flux coated. For bare rods use Harris 600 Brazing Flux. This flux can be applied as a powder or mixed with water to form a paste. Bare rods can also be slightly heated with a torch flame and dipped in the flux. The flux will adhere to the heated end, (referred to as "hot-rodding"). Remove flux residue after brazing.

SPECIFICATION COMPLIANCE:

AWS A5.8 RBCuZn-A, ASME SFA 5.8 RBCuZn-A, ISO 17672 Cu470

SAFETY INFORMATION:

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

FUMES AND GASES can be hazardous to your health.

HEAT RAYS, (infrared radiation) from flame or hot metal can injure eyes.

- Before use, read and understand the manufacturer's instructions, Safety Data Sheets (SDS), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the flame, or heat source, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- See American National Standard Z49.1, *Safety in Welding, Cutting, and Allied Processes*, published by the American Welding Society, 8669 Doral Blvd., Doral, Florida 33166; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402.

STATEMENT OF LIABILITY- DISCLAIMER:

Any suggestion of product applications or results is given without representation or warranty, either expressed or implied. Without exception or limitation, there are no warranties of merchantability or of fitness for particular purpose or application. The user must fully evaluate every process and application in all aspects, including suitability, compliance with applicable law and non-infringement of the rights of others. The Harris Products Group and its affiliates shall have no liability in respect thereof.

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