



TECHNICAL INFORMATION SHEET

SUPER DYNAFLOW®

NOMINAL CHEMICAL COMPOSITION%:

Silver	18.0
Phosphorus	7.30
Copper	Balance

TYPICAL PHYSICAL PROPERTIES:

Solidus	1190°F (643°C)
Liquidus	1199°F (648°C)
Brazing Range	1190°F- 1250°F (643°C -677°C)
Electrical Conductivity	5.90 (%IACS)
Density	0.290 lbs./cu. inch

BRAZING PROPERTIES:

This is an alloy very close to the copper-phosphorus-silver ternary eutectic. The alloy is formulated for joining copper to copper and copper to brass and provides a low melting temperature that reduces brazing time. For joints where longer heating cycles are required the alloy eliminates liquation associated with wider melting range filler metals. Its rapid flow requires close joint tolerance be maintained. The recommended joint clearance is .001"-.003".

Phosphorus containing braze alloys should not be used on steel, (ferrous), or high nickel content base metals due to potential formation of phosphides which may lower joint ductility.

CORROSION RESISTANCE

Generally similar to the copper base metal, but phosphorus containing alloys, including Super Dynaflow, should not be used if the braze is exposed to sulfur or sulfur compounds in service.

AVAILABLE FORMS

Standard wire diameters, preformed rings

RECOMMENDED FLUX:

No flux is required for copper brazing. For brazing brass or copper to brass Stay-Silv® white flux is suitable for most applications. Harris ECO SMART® boric acid free flux, (powder or paste), is also an excellent choice to promote sound brazed assemblies and comply with European REACH requirements.

When flux is used remove all residues after brazing.

SPECIFICATION COMPLIANCE:

Harris Products Group Engineering Specification

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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Additional information available at our web site: www.harrisproductsgroup.com