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TECHNICAL SPECIFICATION SHEET

Harris ECO SMART® BORIC ACID FREE FLUX – COLOR CHANGE

GENERAL INFORMATION



ECO SMART® is a unique, patent-pending flux that is designed with color change technology that lets you know when it is time to braze.

ECO SMART® boric acid free environmentally friendly formula starts out as a green color that changes to clear when the flux becomes active.

Product Features:

- Boric Acid and Borax free - Environmentally friendly
- Homogeneous mix that stays in solution or suspended paste
- Powder flux has excellent adherence when heated rod is dipped into flux
- Dissolves surface oxides and protects against oxidation during heating
- Wide activation range
- Excellent flux coverage during heating
- Easy flux residue removal

PHYSICAL PROPERTIES

Activity range: 427°C (800°F) - 871°C (1600°F)

Activity: Dissolves base metal oxides.

Fluidity/Wetting: Excellent - Promotes filler metal flow through braze.

Spatter: Very little spatter for undiluted flux.

Life - Base Metal Protection: Excellent throughout the active range - Prevents oxidation of base metal during brazing operation.

Capillary: Excellent

Flux removal: Remove flux residue after brazing with wire brush with hot water.

Base Metals: Copper alloys (copper, brasses & bronze) Promotes optimal bonding between like and dissimilar base metals.

Filler Metals: BAg, LAg, LCuP and BCup Alloys

Brazing Methods: Flame, induction and furnace brazing.

Active Temperature Indication: Flux color changes from green to clear to indicate that active temperature has been reached.

Consistency: Smooth, with very little separation; flux remains in suspension when stored for extended periods of time.

BRAZING PROPERTIES:

For brazing steel, stainless steel, Monel®, nickel, copper, brass, bronze and other ferrous and non-ferrous metals and alloys. Use with Stay-Silv®, Safety-Silv® and other brazing filler metals. Extremely fluid. Will penetrate the tightest joints. Not subject to recrystallization (lumpiness-hardening). May be water thinned. Remove all flux residue on completion of brazing.

AVAILABLE FORMS:

250gr, 500gr, 1000gr, 25kg, 50kg (each Paste or Powder)

SPECIFICATION COMPLIANCE:

Does not contain Boric acid or any Sodium-Borate salts. The use of boric acid and sodium-borate salts is subject to restrictions within the European Union per Article 57 (c) of Regulation (EC) 1907/2006 - REACH (Registration, Evaluation, Authorization and Restriction of Chemicals). Studies performed for the EC (European Counsel) found that these chemicals can damage the reproductive systems and fetal development.

AWS Specification: AWS A5.31M/A5.31: 2012 FB3-A

International Standard: EN 1045 FH 10

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

FUMES AND GASES can be hazardous to your health.

- Before use, read and understand the 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.

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