



TECHNICAL INFORMATION SHEET

ECO SMART® HIGH TEMPERATURE BLACK BRAZING PASTE

DESCRIPTION:

ECO Smart high heat brazing paste flux for brazing steel, stainless, Monel, nickel, copper, brass, bronze plus other ferrous metals. High heat is designed to extend the life of the flux. This is helpful during long heating cycles on parts, or in case of intense localized heating, such as induction brazing. This flux is extremely fluid, will penetrate the tightest joints. Not subject to recrystallization (lumpiness-hardness). Maybe thinned using water, remove all residue on completion of brazing.

Eco flux does not contain boric acid or sodium borate salts. The use of boric acid and sodium- borate salts are subject to restrictions within the European Union per article 57(c) 1907/2006- REACH (Registration Evaluation Authorization and Restrictions of Chemicals).

ACTIVITY RANGE:

700 – 1800°F (371 - 982°C)

APPLICATION:

Brazing rod can be dipped in the flux or can be brushed on the surface of the braze joint. Paste can be diluted if desired. Production post-braze cleaning can also be accomplished with proprietary chemical formulas such as Bernite® 45 available from Harris Products Group. This approach is suitable where parts lend themselves to a water bath/tank immersion.

AVAILABLE CONTAINERS:

250g and 500g container

SPECIFICATION COMPLIANCE:

AWS A5.31 Class FB3-C, AMS 3411,
Fed. Spec. OF-499, Type B, ISO 18496 type FH12 (formerly EN 1045)

SAFETY INFORMATION:

WARNING: CONTAINS FLUORIDES.

PROTECT YOURSELF AND OTHERS. Read and understand this information.

BURNS EYS AND SKIN. CAN BE FATAL IF SWALLOWED.

FUMES AND GASES can be hazardous to your health.

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

- Before using it, 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 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 a 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.

THE HARRIS PRODUCTS GROUP

A LINCOLN ELECTRIC COMPANY 

4501 Quality Place • Mason, OH 45040 U.S.A Tel: 513-754-2000 Fax: 513-754-6015

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