



TECHNICAL INFORMATION SHEET

SOLAR FLUX TYPE B

DESCRIPTION:

SOLAR FLUX® Type B is a powder that can be mixed with alcohol (methanol preferred). Its shelf life is infinite in its dry powder state. This flux is unaffected by freezing. It has no flash point and is non-explosive. Two ounces of SOLAR FLUX® Type B, properly mixed and applied, will cover 80 linear feet of joints. SOLAR FLUX® Type B is used for welding stainless steel and high chromium alloys.

Nominal Composition

Proprietary Information

APPLICATION:

SOLAR FLUX® is used in lieu of argon for back purging. SOLAR FLUX® is formulated to shield the back of the weld joint from oxygen, dissipate heat and unwanted oxides and to clean the surface of the metal. It aids in the flow of filler metal over base metal to form a protective barrier to prevent re-oxidation and heat scale. SOLAR FLUX® Type B is best used for welding stainless steel, precipitation hardening steels, chrome-moly steels, and other alloy steels with a nickel content below 25%. (May be used on 309 and 310, although SOLAR FLUX® Type I is recommended.) Some piping systems require absolute purity. SOLAR FLUX® is not recommended for food or beverage lines where subsequent product refining will not take place, medical oxygen lines, computer chip manufacturing air lines, and steam lines operating above 1000°F (538°C). In these situations, gas purging is recommended to avoid nitric acid/hydrofluoric acid cleaning.

ACTIVITY RANGE:

Welding active range 2000°F- 2900°F (1093°C-1593°C)

SPECIFICATION COMPLIANCE:

Military Specification MIL-F-7516B, classes 2 and 4
Meets the Buy American Act

AVAILABLE CONTAINERS:

1lbs containers

FLUX REMOVAL:

SOLAR FLUX® is chemically inert in its refractory state after welding. The thin glass-like residue adheres tenaciously to the base metal and does not usually need to be removed. However, the flux residue can be removed by grinding, chipping, or sandblasting. If this is not possible, or where parts are thin or might suffer from such methods, any one of several pickling baths of different formulae will remove the residue effectively. One recommended hot pickling bath (160° to 170°F) requiring immersion for 6-7 minutes is composed of nitric and hydrofluoric acid (10% and 4% by volume, respectively, balance water). **Pickling solutions should not be used on mild steel or alloys containing less than 16% chromium and 8% nickel.**

AVAILABLE CONTAINERS:

1lbs containers

SAFETY INFORMATION:

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

FUMES AND GASES can be hazardous for 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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