BRIDGIT® SOLDERING FLUX

MATERIAL SAFETY DATA SHEET

01/11/00

MSDS PROVIDED BY:
STOODY INDUSTRIAL AND WELDING SUPPLY, INC.
3316 National Ave., San Diego, Ca. 92113
Phone: (619) 234-6750
MILITARY EMERGENCY RESPONSE NUMBER 1-800-851-8061

Warning: Protect yourself and others, read and understand this information.

Warning! Contains Zinc Chloride. Skin and eye irritant. Avoid contact with skin, eyes and mucous membranes. Avoid breathing fumes given off during heating. In case of contact with eyes of skin, flush with water for at least 15 minutes. Get medical attention. If swallowed, give plenty of water or milk. Do not induce vomiting. Call physician immediately. Never give fluids or induce vomiting if person is unconscious or having convulsions. A Material Safety Data Sheet (MSDS) for this product follows. Additional MSDS are available from your employer or by contacting the J.W. Harris Co., Inc., Cincinnati, Ohio 45242.

KEEP OUT OF REACH OF CHILDREN!

MATERIAL SAFETY DATA SHEET BRIDGIT® SOLDERING FLUX

SECTION 1

Manufacturer's Name	J. W. Harris Co., Inc.	Emergency Telephone No.	1-800-424-9300
Address	10930 Deerfield Rd.	Telephone No. for Info.	1-513-891-2000
	Cincinnati, OH 45242	Date Prepared	6/97

SECTION 2 - HAZARDOUS INGREDIENTS

INGREDIENT	CAS NUMBER	PEL MG/M3	TLV MG/M3
Zinc Chloride* > 20%	7646-85-7	1.0	1.0
Ammonium Chloride < 5%	12125-2-9	10.0	10.0

Upper bound concentration value per SARA III 372.45.F.

SARA SECTION 313 SUPPLIER NOTIFICATION: Bridgit flux may contain toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40CFR 372. Refer to Section 2 for the CAS number for each chemical ingredient.

NFPA HAZARD SIGNAL

Health	**1**	**Stability**	**0**	**Flammability**	**0**	**Special**	**0**

One recommended way to determine the composition and quantity of fumes and gases to which workers are exposed is to take an air sample in the worker's breathing zone. See ANSI/AWS F1.1 available from the American Welding Society, 550 N.W. LeJeune, Miami, FL 33126.

SECTION 3 - PHYSICAL AND CHEMICAL DATA

Appearance – Off white color paste pH – 2.0-3.0 Solubility in water - Moderate

SECTION 4 - FIRE AND EXPLOSION DATA

Flash point - 239°F. When heated the material may release zinc chloride and zinc oxide fumes. If large quantities are involved in a fire, firefighters should use self-contained breathing apparatus and protective clothing.

SECTION 5 - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE - Inhalation - Fumes generated during soldering may irritate the nose, throat and respiratory tract. Ingestion - Swallowing can cause irritation to the esophagus and other areas, abdominal cramps,

nausea, liver and kidney effects. Eye Contact - Causes severe irritation with possible injury to eye tissue. Skin contact – Prolonged skin contact may produce drying or irritation to the skin. EMERGENCY FIRST AID PROCEDURES - Eye Contact - Flush with water for at least 15 minutes, including under the eyelids. Get medical attention. Skin Contact - Flush with water. Ingestion - If swallowed, do not induce vomiting, give plenty of milk or water. Promptly get medical attention. Never give fluids or induce vomiting if person is unconscious or having convulsions. Inhalation - Move to fresh air, consult physician.

CARCINOGENICITY NTP? NO	IARC MONOGRAPHS? NO	OSHA REGULATED? NO

SECTION 6 - REACTIVITY DATA - HAZARDOUS DECOMPOSITION PRODUCTS

Flux is a stable material in closed containers at room temperature under normal storage and handling conditions. This material can be considered a weak acid. It can be mildly corrosive to some metals, especially when hot. Soldering fumes cannot be classified simply. The composition and quantity are dependent upon the metal being soldered, the process, procedures and types of solders used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal being soldered (such as paint, plating or galvanizing), the number of operators and the volume of the work area, the quality and amount of ventilation, the position of the operator's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities).

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled - Neutralize with a sodium carbonate and water solution. Waste Disposal Method - Flush to chemical waste disposal according to Federal, State and Local regulations.

SECTION 8 AND 9-SPECIAL PROTECTION-INFORMATION AND PRECAUTIONS

Read and understand the manufacturer's instructions and the precautionary label on the product. See American National Standard Z49.1, Safety in Welding, Cutting and Allied Processes published by the American Welding Society, 550 N.W. LeJeune, Miami, FL 33126 and OSHA Publication 2206 (29CFR1910), U.S. Government Printing Office, Washington, D.C. 20402 for more details on the following.

VENTILATION - Use enough ventilation to keep the fumes and gases below TLV's in the worker's breathing zone and the general area. Train the employee to keep his head out of the fumes. See ANSI/ASC Z49.1 Section 5.

RESPIRATORY PROTECTION - Use respirable fume respirator or air supplied respirator when soldering in confined space or where local exhaust or ventilation does not keep exposure below TLV.

EYE PROTECTION - Wear safety glasses, goggles or use face shield with filter lens of appropriate shade number (see ANSI/ASC Z49.1-Section 4.2). Provide protection screens and flash goggles, if necessary, to shield others. Wear face shield if splashing is probable.

PROTECTIVE CLOTHING - Wear head and body protection which help to prevent injury from splashing, sparks and flame. See ANSI Z49.1. At a minimum, this includes gloves and a protective face shield, and may include arm protectors, aprons, hats, shoulder protection, as well as dark substantial clothing.

The information and recommendations contained in this publication have been compiled from sources believed to be reliable and to represent the best information on the subject at the time of issue. No warranty, guarantee or

representation is made by J. W. Harris Co., Inc. as to the absolute correctness or sufficiency of any representation contained in this and other publications; J. W. Harris Co., Inc. assumes no responsibility in connection therewith; nor can it be assumed that all acceptable safety measures are contained in this (and other publications), or that other or additional measures may not be required under particular or exceptional conditions or circumstances.

D.O.T INFORMATION: Non-regulated substance
OUR PRODUCTS HAVE NO OZONE DEPLETING SUBSTANCES, (ODS).

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