



IMPORTANT! READ THIS MATERIAL SAFETY DATA SHEET BEFORE USING PRODUCT

MATERIAL SAFETY DATA SHEET

SOLDERS - LEAD FREE

SECTION 1 - MATERIAL IDENTIFICATION

Table with 2 columns: Field (Manufacturer, Address, Emergency Telephone No., Telephone No. for Info., Signature of Preparer, Date Prepared) and Value (J.W. Harris Co., Inc., 10930 Deerfield Rd., Cincinnati, OH 45242, 1-800-424-9300, 1-513-891-2000, [Signature], 4/95)

Wire Composition Wt%

Table with 7 columns: TRADE NAME, Sn, Ag, Sb, Cu, Zn, Ni. Rows include Stay-Brite, Stay-Brite Rosin Core, Stay-Brite 8, Stay-Safe 50, Stay-Safe Bridgit, Speedy, Nick, 85/15, 95/5.

ROSIN CORE COMPOSITION

Table with 3 columns: ELEMENT, Wt. (% of core wt.), Wt. (% of total solder wt.). Row: Activated Rosin, 100, 1 - 3

SECTION 2 - HAZARDOUS INGREDIENTS

Table with 4 columns: ELEMENT, CAS#, PEL mg/m3(1), TLV mg/m3(2). Rows: Zinc (oxide) <5%, Tin(oxide) <5%, Antimony, Silver (metal), Copper (fume), Lead.

Permissible exposure limit OSHA 1910 Subpart Z.

TLV - Threshold limit value American Conference of Government Industrial Hygienists.

\*Upper bound concentration value per SARA III 372.45.F.

One recommended way to determine the composition and quantity of fumes and gases to which workers are exposed is to take an air sample from the worker's breathing zone. See ANSI/AWS F1.1 available from the American Welding Society, P. O. Box 351040, Miami, FL 33135.

SARA SECTION 313 SUPPLIER NOTIFICATION: Individual filler metals covered by this MSDS may contain the following 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: Copper, Zinc, and Nickel. Refer to Section 1 of this MSDS for the filler metal name and the percent by weight, and Section 2 for the CAS Number for each chemical.

NFPA HAZARD SIGNAL

Health 1 Stability 0 Flammability 0 Special 0

Soldering wire is a nonhazardous solid at ambient temperature. Hazards (as defined by OSHA 29CFR 1910, 1200) may result from fume generated during use. Section 1 lists product designations and compositions as manufactured.

IMPORTANT - See Section 6 for information on potential fume hazard resulting from use of the product.

SECTION 3 - PHYSICAL DATA

Wire, gray to silver in color. Stay Brite Rosin Core Solder contains an inner core of flux.

SECTION 4 - FIRE AND EXPLOSION DATA

Nonflammable. Open flame and sparks can ignite combustibles. See ANSI/ASC-Z49.1-1983 Section 6.

SECTION 5 - HEALTH HAZARD DATA

URE-Section 1 lists nominal composition of the solid product.

6 lists exposure limits for decomposition products which might be present in fume generated during soldering. Actual exposure should be determined by monitoring the fume in the operator's breathing zone.

PRIMARY ROUTE OF EXPOSURE-Inhalation of fume.

PRE-EXISTING MEDICAL CONDITIONS-Individuals with impaired pulmonary functions or illness may have symptoms exacerbated by fume irritants.

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POSSIBLE EFFECTS OF EXPOSURE-Copper, tin, zinc, and antimony fume may cause metal fume fever. Short term symptoms may include a metallic taste in the mouth, dryness or irritations of the throat followed by fever, body ache, and chills. Long term exposure to soldering fume, gases or dust may contribute to pulmonary irritation or pneumoconiosis.

EMERGENCY FIRST AID-Remove from dust or fume exposure. If breathing has stopped perform artificial respiration. Summon medical aid immediately.

OTHER HEALTH CONSIDERATIONS-Fumes from flux (zinc chloride, etc.) used during soldering may be irritating to respiratory tract.

WARNING: Some of these products contain a chemical known to the State of California to cause cancer.

SOLDERING PRODUCTS WITHOUT NICKEL CARCINOGENICITY NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO

SOLDERING PRODUCTS CONTAINING NICKEL CARCINOGENICITY NTP? YES IARC MONOGRAPHS? YES OSHA REGULATED? NO

SECTION 6 - REACTIVITY DATA HAZARDOUS DECOMPOSITION PRODUCTS

Soldering fumes cannot be classified simply. The composition and quantity are dependent upon the metal being soldered, the process, procedures and filler metals used. Other conditions which also influence the composition and quantity of the fumes to which workers may be exposed include: coatings on the metal being soldered (such as paint, plating, or galvanizing), the amount of ventilation, and the position of the operator's head with respect to the fume. When the solder is consumed, the fume decomposition products generated may be different in percent and form from the solid wire ingredients listed in Section 1. Fume decomposition products and not the ingredients in the wire are important.

SECTION 7 - SPILL OR LEAK PROCEDURES

NOT APPLICABLE

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 and Cutting published by the American Welding Society, PO BOX 351040, Miami, FL 33135 and OSHA Publication 2206 (29CFR1910), U. S. Government Printing Office, Washington, D.C. 20402 for more details on many of the following.

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

RESPIRATORY PROTECTION-When soldering in a confined space, or where local exhaust or ventilation does not keep exposure below TLV, use a respirable fume respirator or an air supplied respirator.

EYE PROTECTION-Wear protective eye wear if necessary to protect eyes from splashing of flux or molten solder.

PROTECTIVE CLOTHING-No specific clothing is required; however, wear sensible work clothes to protect skin from sparks, heat, flux, etc.

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: Nonregulated substance OUR PRODUCTS HAVE NO OZONE DEPLETING SUBSTANCES, (ODS).

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