

# Material Safety Data Sheet

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## SECTION I - Material Identity

### Item Name

Part Number/Trade Name	STAY CLEAN LIQUID SOLDERING FLUXES
National Stock Number	3439PSCLE4
CAGE Code	27911
Part Number Indicator	A
MSDS Number	187920
HAZ Code	B

## SECTION II - Manufacturer's Information

Manufacturer Name J. W. HARRIS CO., INC  
Street 10930 DEERFIELD RD  
City CINCINNATI  
State OH  
Country US  
Zip Code 45242  
Emergency Phone 800-543-4536  
Information Phone 513-891-2000

### MSDS Preparer's Information

MSDS Preparer Name K.C  
Date MSDS Prepared/Revised 14DEC99  
Date of Technical Review 11DEC90  
Active Indicator N

### Alternate Vendors

Vendor #5 CAGE BJFNN

### SECTION III - Physical/Chemical Characteristics

Specification Number MIL-STD-130  
Specification Type/Grade/Class TY I  
Hazard Storage Compatibility Code C3-L1  
NRC License Number NR  
Net Propellant Weight (Ammo) NR

Appearance/Odor	CLEAR, COLORLESS LIQUID WITH A SLIGHT, SWEET ODOR
Boiling Point	NR
Melting Point	NR
Vapor Pressure	NR
Vapor Density	NR
Specific Gravity	.9
Decomposition Temperature	NR
Evaporation Rate	>1
Solubility in Water	SLIGHT
Percent Volatiles by Volume	NR
Chemical pH	NR
Corrosion Rate	NR
Container Pressure Code	1
Temperature Code	4
Product State Code	L

#### SECTION IV - Fire and Explosion Hazard Data

Flash Point Method	NA
Lower Explosion Limit	N/K
Upper Explosion Limit	N/K
Extinguishing Media	USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY CHEMICAL
Special Fire Fighting Procedures	FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE
Unusual Fire/Explosion Hazards	FIRE OR EXCESSIVE HEAT MAY CAUSE PRODUCTION OF ZINC CHLORIDE AND ZINC OXIDE FUMES

Stability	YES
Stability Conditions to Avoid	HIGH TEMPERATURES, FLAMES
Materials to Avoid	CYANIDES
Hazardous Decomposition Products	ZINC CHLORIDE AND ZINC OXIDE FUMES
Hazardous Polymerization	NO
Polymerization Conditions to Avoid	NOT APPLICABLE
LD50 - LD50 Mixture	LD50 (ORAL RAT) IS UNKNOWN

## SECTION VI - Health Hazard Data

Route of Entry: Skin	YES
Route of Entry: Ingestion	YES
Route of Entry: Inhalation	YES
Health Hazards - Acute and Chronic	ACUTE-EYES: IRRITATION. SKIN: IRRITATION. INHALATION: IRRITATES RESPIRATORY SYSTEM. CHRONIC-NONE SPECIFIED BY MANUFACTURER
Carcinogenity: NTP	NO
Carcinogenity: IARC	NO
Carcinogenity: OSHA	NO
Explanation of Carcinogenity	NONE OF THE COMPOUNDS IN THIS PRODUCT IS LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN
Symptoms of Overexposure	EYE, SKIN & RESPIRATORY TRACT IRRITATION
Medical Cond. Aggravated by Exposure	PERSONS WITH A HISTORY OF AILMENTS OR WITH A PRE-EXISTING DISEASE INVOLVING THE EYES, SKIN, OR RESPIRATORY TRACT MAY BE AT INCREASED RISK FROM EXPOSURE
Emergency/First Aid	INHALATION: REMOVE TO FRESH AIR. EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES HOLDING EYELIDS OPEN. GET MEDICAL

## SECTION VIII - Control Measures

Respiratory Protection	USE RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN BRAZING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV
Ventilation	MECHANICAL (GENERAL) ROOM VENTILATION IS NORMALLY ADEQUATE. LOCAL EXHAUST MAY BE REQUIRED IF WORK AREA NOT VENTED
Protective Gloves	WELDERS GLOVES AND PROTECTIVE FACE SHIELD
Eye Protection	SAFETY GOGGLES WITH OPTIONAL FACE SHIELD
Other Protective Equipment	EYE WASH STATION AND SAFETY SHOWER. INDUSTRIAL-TYPE WORK CLOTHING AND APRON AS REQUIRED
Work Hygenic Practices	OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR
Supplemental Health/Safety Data	AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO NOT BREATHE VAPORS OR MISTS. PROVIDE PROTECTION SCREENS AND FLASH GOGGLES. IT IS A MILD ACID AND FLAMMABLE (PER MFR)

## SECTION IX - Label Data

Protect Eye	YES
Protect Skin	YES
Protect Respiratory	YES
Chronic Indicator	YES
Contact Code	SLIGHT
Fire Code	UNKNOWN
Health Code	UNKNOWN
React Code	UNKNOWN
Specific Hazard and Precaution	TARGET ORGANS: MUCOUS MEMBRANES, RESPIRATORY SYSTEM, SKIN

## SECTION X - Transportation Data

## SECTION XI - Site Specific/Reporting Information

Volatile Organic Compounds (P/G)	.3753
Volatile Organic Compounds (G/L)	44.9755

## SECTION XII - Ingredients/Identity Information

Ingredient #	01
Ingredient Name	(ZNCPD) ZINC CHLORIDE (<30%)
CAS Number	7646857
NIOSH Number	ZH1400000
Proprietary	NO
Percent	30
OSHA PEL	1 MG/M3/2 STEL
ACGIH TLV	1 MG/M3/2STEL FUME93
Recommended Limit	NONE SPECIFIED
Ingredient #	02
Ingredient Name	AMMONIUM CHLORIDE (5-25%)
CAS Number	12125029
Percent	25
Ingredient #	03
Ingredient Name	HYDROCHLORIC ACID (<5%)
CAS Number	7647010
Percent	5
Ingredient #	04
Ingredient Name	METHANOL (<5%)
CAS Number	67561

Percent	5
Ingredient #	05
Ingredient Name	WATER (BALANCE)
CAS Number	7732185
Percent	0