

3HSS – HIGH SPEED TOOL STEEL - TIG

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

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VERSION DATE 01/03/96 (REPRODUCED SIWS)

SECTION 1

PRODUCT IDENTIFICATION

COMPANY NAME WHO PROVIDED MSDS..... HARRIS WELCO. DIV. OF J.W. HARRIS CO., INC.
COMPANY ADDRESS..... 1051 YORK RD
KINGS MOUNTAIN, NC 28086
EMERGENCY PHONE NUMBER (800)-424-9300
MSDS VERSION NUMBER..... 2
TRADE NAME 3HSS - HIGH SPEED TOOL STEEL - TIG
HAZARD RATING (HMIS) HEALTH-3
FLAMMABILITY-0
REACTIVITY-0
OTHER-0
HMIS DESIGNATED KEY 4-SEVERE HAZARD
3-SERIOUS HAZARD
2-MODERATE HAZARD
1 -SLIGHT HAZARD
0--MINIMAL HAZARD

SECTION 2

HAZARDOUS COMPONENTS

<u>MATERIAL</u>	<u>% BY WEIGHT</u>	<u>CAS NUMBER</u>	<u>ACGIH TLV (Mg/M3)</u>	<u>SEC 313</u>
CARBON	0.87	7782-42-6	3.5	NA
SILCON	0.2	60676-86-0	5	NA
MANGANESE	0.3	7439-96-5	1	YES
CHROMIUM	4.3	7440-47-3	0.05	YES
MOLYBDENUM	5	7439-98-7	5	NA
VANADIUM	1.9	7440-62-2	0.1	YES
TUNGSTEN	6.4	7440-33-7	5	NA
IRON	BALANCE	7439-89-6	5	NA

SECTION 3

PHYSICAL PROPERTIES

BOILING POINT..... NA
MELTING POINT NA
VAPOR PRESSURE NA
VAPOR DENSITY (AIR=1)..... NA
SOLUBILITY IN WATER..... NA
SPECIFIC GRAVITY NA
EVAPORATION RATE NA
APPEARANCE AND ODOR..... SOLID WIRE OR ROD. RODS ARE COATED WITH FLUX FOR WELDING PROCESS.

SECTION 4

FIRE AND PXPLOSION DATA

FLASH POINT..... NONFLAMMABLE
EXRINGUISHING MEDIA NA
SPECIAL PROCEDURES..... WELDING ARC, OPEN FLAME AND SPARK CAN IGNITE COMBUSTIBLES.
SEE ANSI/ASC Z.49.1, 1-1983 SECTION 6
UNUSUAL HAZARDS NA

SECTION 5

REACTIVITY DATA

STABILITY..... STABLE
CONDITIONS TO AVOID..... NA
HAZARDOUS POLYMERIZATION WILL NOT OCCUR
INCOMPATIBILITY NA
HAZARDOUS DECOMPOSITION PRODUCTS WELDING FUMES BUILT DURING WELDING PROCESS COMPOSITION SEE SECTION II

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SECTION 6

HEALTH HAZARD DATA

ROUTES OF ENTRY HEALTH HAZARDS CARCINOGENICITY SIGNS & SYMPTOMS OF EXPOSURE MEDICAL CONDITIONS FROM EXPOSURE EMERGENCY & FIRST AID..... ADDITIONAL INFORMATION	INHALATION SEE ADDITIONAL INFORMATION THE STATE OF CALIFORNIA REQUIRES THE FOLLOWING INFORMATION WARNING: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER SEE ADDITIONAL INFORMATION LONG TERM EXPOSURE MAY CONTRIBUTE TO PULMONARY IRRITATION OR PNEUMOCONIOSIS. INDIVIDUALS WITH IMPAIRED PULMONARY FUNCTION OR ILLNESS MAY HAVE SYMPTOMS EXACERBATED BY FUME IRRITANTS. REMOVE FROM DUST OR FUME EXPOSURE. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. SUMMON MEDICAL AID IMMEDIATELY. INHALATION OF FUMES, RAYS FROM WELDING OPERATION CAN INJURE EYES AND BURN SKIN. WELDING ELECTRODES & WIRE ARE NONHAZARDOUS SOLIDS AT AMBIENT TEMPERATURE. ACTUAL EXPOSURE SHOULD BE DETERMINED BY MONITORING THE FUME IN THE OPERATOR’S BREATHING ZONE. COMPOUNDS OF CHROMIUM AND NICKEL IN THE FUME SHOULD BE CONSIDERED POSSIBLE CARCINOGENS PER OSHA 29 CFR 1920.1200. NO CLEAR ASSOCIATION, HOWEVER, HAS BEEN ESTABLISHED BETWEEN CR AND NI IN WELDING FUME AND THE DEVELOPMENT OF CANCER. SHORT TERM EXPOSURE TO WELDING FUME MAY RESULT IN DISCOMFORT, DIZZINESS NAUSEA, OR DRYNESS OR IRRITATION OF THE THROAT.
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SECTION 7

PRECAUTIONS FOR SAFE HANDLING AND USE

SPILL AND LEAK PROCEDURES WASTE AND DISPOSAL METHOD..... HANDLING AND STORING PRECAUTIONS OTHER PRECAUTIONS.....	NA NA AVOID HUMIDITY AND SHOCKS ELECTRIC SHOCK FROM ARC WELDING EQUIPMENT CAN KILL.
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SECTION 6

CONTROL MEASURES

RESPIRATORY MEASURES VENTILATION PROTECTIVE GLOVES..... EYE PROTECTION OTHER PROTECTIVE EQUIPMENT WORK/HYGIENIC PRACTICES	USE ENOUGH VENTILATION TO KEEP THE FUMES AND GASES BELOW TLV’S IN THE WORKER’S BREATHING ZONE. SEE ANSI/ASC Z.49.1 SECTION 6. LOCAL AND MECHANICAL EXHAUST RECOMMENDED. WELDER’S GLOVES RECOMMENDED. COLOR ABSORTION GLASSES. WELDING HELMET AND PROTECTIVE CLOTHING SUCH AS LEATHER APRON. READ AND UNDERSTAND MANUFACTURER’S INSTRUCTIONS. SEE AMERICAN NATIONAL STANDARD Z.49.1. FOR MAXIMUM SAFETY: BE CERTIFIED FOR AND WEAR A RESPIRATOR AT ALL TIMES WHEN WELDING AND OR BRAZING.
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SECTION 9

DISCLAIMER

THIS DATA IS BELIEVED TO BE ACCURATE. HARRIS WELCO MAKES NO WARRANTY TO AND DISCLAIMS ALL LIABILITY FROM RELIANCE.

SECTION 10

ADDITIONAL INFORMATION

NA = NOT APPLICABLE
 CARCINOGENICITY INFORMATION: CHROMIUM COMPOUNDS ARE
 REQUIRED BY OSHA TO BE CONSIDERED TO BE CARCINOGENIC.