

4AH - AIR HARD TOOL STEEL
MATERIAL SAFETY DATA SHEET

01/11/00

MSDS PROVIDED BY:
STOODY INDUSTRIAL AND WELDING SUPPLY, INC.
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MILITARY EMERGENCY RESPONSE NUMBER 1-800-851-8061

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4AH - AIR HARD TOOL STEEL

SECTION 1

PRODUCT IDENTIFICATION

COMPANY NAME WHO SENT MSDS	HARRIS WELCO, DIV. OF J.W. HARRIS CO., INC.
COMPANY ADDRESS	1051 YORK ROAD KINGS MOUNTAIN, NC 28086
EMERGENCY PHONE NUMBER	(800)-424-9300
MSDS VERSION NUMBER	2
TRADE NAME	4AH - AIR HARD TOOL STEEL
HAZARD RATING (HMIS).....	HEALTH - 3, FLAMMABILITY - 0, REACTIVITY - 0, OTHERS - 0
HMIS DESIGNATION KEY.....	4 - SEVERE HAZARD, 3 - SEVERE 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>
CHROMIUM	4.75-5.25	7440-47-3	1	YES
MOLYBDENUM	1.9-2.2	7439-98-7	10	NA
SILICON	.3-.5	7440-21-3	5	NA
MANGANESE	.35-.5	7439-96-5	1	YES
TUNGSTEN	1.0-1.1	7440-33-7	5	YES
VANADIUM	.9-1.0	1314-62-1	0.05	YES
TITANIUM DIOXIDE	NA	1317-65-7	10	NA
CALCIUM CARBONATE	NA	1317-65-3	15	NA
CALCIUM FLOURIDE	NA	14542-23-5	2.5	NA
POTASSIUM SILICATE	NA	1312-76-1	NA	NA
SODIUM SILICATE	NA	1344-09-8	NA	NA

SECTION 3

PHYSICAL PROPERTIES

BOILING POINT	NA
MELTING POINT	NA
VAPOR DENSITY (AIR = 1)	NA
SOLUBILITY IN WATER	NA
SPECIFIC GRAVITY	NA
EVAPORATION RATE	NA
APPEARANCE AND ODOR.....	SOLID ROD FLUX COATED

SECTION 4

FIRE AND EXPLOSION DATA

FLASH POINT	SEE AMERICAN NATIONAL STANDARD Z.49.1 NA
EXTINGUISHING MEDIA.....	SEE AMERICAN NATIONAL STANDARD Z.49.1 NA
SPECIAL PROCEDURES	SEE AMERICAN NATIONAL STANDARD Z.49.1 NA
UNUSUAL HAZARDS.....	NA

SECTION 5

REACTIVITY DATA

STABILITY	STABLE
CONDITIONS TO AVOID	NA
HAZARDOUS POLYMERIZATION.....	WILL NOT OCCUR
CONDITIONS TO AVOID	NA
INCOMPATIBILITY	NA
HAZARDOUS DECOMPOSITION 'PR' O' DUCTS.....	NA

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HEALTH HAZARD DATA

ROUTES OF ENTRY	INHALATION
HEALTH HAZARDS	PULMONARY IRRITATION FROM DUST INHALATION
CARCINOGENICITY	THE STATE OF CALIFORNIA REQUIRES THE FOLLOWING INFORMATION WARNING: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.
SIGNS & SYMPTOMS OF EXPOSURE	OVEREXPOSURE TO WELDING FUMES MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA, OR DRYNESS OR IRRITATION OF NOSE OR EYES.
MEDICAL CONDITIONS FROM EXPOSURE.....	COULD AFFECT PULMONARY FUNCTIONS.
EMERGENCY & FIRST AID	REMOVE TO FRESH AIR.
ADDITIONAL INFORMATION.....	NONE

SECTION 7

PRECAUTIONS FOR SAFE HANDLING AND USE

SPILL AND LEAK PROCEDURES	NA
WASTE AND DISPOSAL METHOD	FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS
HANDLING AND STORING PRECAUTIONS	NA
OTHER PRECAUTIONS	NORMAL HANDLING COLD. CAUTION WHEN HOT.

SECTION 8

CONTROL MEASURES

RESPIRATORY MEASURES	WELD FUME RESPIRATORY OR AIRLINE RESPIRATOR FOR CONFINED SPACES.
VENTILATION	IN SEMI-OPEN OR POOR VENTILATION SPACES USE LOCAL EXHAUST. MECHANICAL EXHAUST RECOMMENDED FOR POORLY NATURAL VENT SPACES.
PROTECTIVE GLOVES.....	WELDERS GLOVES.
EYE PROTECTION	FACE SHIELD & SAFETY GLASS #12.
OTHER PROTECTIVE EQUIPMENT:	WELDERS CLOTHING FOR PROTECTION AGAINST SPARKS AND HOT MATERIALS.
HYGIENIC PRACTICES	FOR MAXIMUM SAFETY: BE CERTIFIED FOR, AND WEAR A RESPIRATOR AT ALL TIMES WHEN WELDING OR BRAZING. DISPOSE OF WELDING STUBS AND KEEP SAFETY LENS CLEAN.

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 COMPONENTS ARE
REQUIRED BY OSHA TO BE CONSIDERED CARCINOGENIC.