

Material Safety Data Sheet  
\*89-250-824/A\*

SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER: Graphite Shapes, Standard Grade  
CATALOG NUMBERS: 47-xxx-xxx, 48-xxx-xxx  
PRODUCT USE: Welding Aid  
MANUFACTURERS NAME: TWECO Products, Inc. EMERGENCY PHONE #: (316)946-8308  
STREET ADDRESS: 4200 West Harry P.O. Box 12250  
CITY: Wichita STATE: Kansas ZIP CODE: 67277  
PREPARED BY: Dennis Wilson PHONE NUMBER: (316)946-8308  
DATE PREPARED: July 1989 DATE REVISED: January 4, 2000

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	% RANGE	CAS NUMBER	OSHA PEL	ACGIH TLV
Graphite (natural)	99-100	7782-42-5	15mg/M3	10mg/M3

SECTION 313 SUPPLIER INFORMATION

THIS PRODUCT DOES [ ] DOES NOT [X] 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 40 CFR 372.

CAS NUMBER	CHEMICAL NAME	%
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THIS INFORMATION MUST BE INCLUDED IN ALL MSDSs THAT ARE COPIED AND DISTRIBUTED FOR THIS PRODUCT.

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE: Solid ODOR AND APPEARANCE: No odor, various solid black shapes  
VAPOR PRESSURE(mm Hg): N.App. VAPOR DENSITY: (air=1): N.App. EVAPORATION RATE: N.App. BOILING POINT (F/C): Sublimes FREEZING POINT(F/C): N.App. pH: N.App. SPECIFIC Gravity: 2.0 SOLUBILITY: Negligible

SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY: Yes [ ] No [X] IF YES, MEANS OF EXTINCTION: Will not support combustion FLASHPOINT(F/C) AND METHOD: N.App. FLAMMABLE LIMIT: N.App. LEL: N.App. UEL: N.App. UNUSUAL FIRE AND EXPLOSION HAZARDS: None

N.App.: NON APPLICABLE; N.AV.: NOT AVAILABLE

N.F.P.A. RATING SYSTEM: 0 - INSIGNIFICANT; 1 - SLIGHT; 2 - MODERATE; 3 - HIGH; 4 - EXTREME

Health = 1 Flammability = 0 Reactivity = 0 Special = none  
WHMIS CLASSIFICATION: CLASS "D" DIVISION 2 SUB-DIVISION "G"

SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY: Yes [X] No [ ] IF NO, CONDITIONS TO AVOID: N.App.  
INCOMPATIBILITY WITH OTHER SUBSTANCES: Yes [ ] No [X] IF SO, WHICH ONES? N.App. HAZARDOUS POLYMERIZATION: Will Occur [ ] Will Not Occur [X]  
CONDITIONS TO AVOID: N.App. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide

## SECTION 6 - HEALTH HAZARD DATA

ROUTES OF ENTRY: SKIN CONTACT [ ] Unlikely; SKIN ABSORPTION [ ] Unlikely; EYE CONTACT [ ] Unlikely; INHALATION [X] Possible; INGESTION [ ] Unlikely EFFECTS OF ACUTE/CHRONIC EXPOSURE TO PRODUCT: Normal use of solid graphite shapes does not generate dust. If dust is generated, prolonged or repeated exposure may cause pneumoconiosis. CARCINOGENICITY: Not Listed SIGNS AND SYMPTOMS OF EXPOSURE: Symptoms are insidious MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Respiratory problems related to dust exposure EMERGENCY AND FIRST AID PROCEDURES: N.App.

## SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

LEAK AND SPILL PROCEDURE: Vacuum or sweep up spills following good housekeeping practices WASTE DISPOSAL METHOD: Bury in approved landfills in accordance with operating permits PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Prevent dust escape to atmosphere. Avoid breathing dust. OTHER PRECAUTIONS: Graphite dust is electrically conductive; therefore, accumulations can cause short circuits to occur.

## SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: NIOSH approved for nuisance dust when present GLOVES: N.App. RESPIRATOR: N.App EYE: Safety Glasses FOOTWEAR: N.App. CLOTHING: N.App OTHER: N.App. VENTILATION: Recommended as in any welding operation SPECIAL: N.App. MECHANICAL: Recommended as in any welding operation WORK/HYGIENIC PRACTICES: Follow good personal hygiene and housekeeping procedures.

THIS DATA IS OFFERED IN GOOD FAITH AS TYPICAL VALUES. THIS IS NEITHER AN EXPRESSED NOR IMPLIED PRODUCT SPECIFICATION. RECOMMENDED HANDLING PROCEDURES AND HYGIENE ARE BELIEVED TO BE ACCURATE, HOWEVER, THESE RECOMMENDATIONS SHOULD BE REVIEWED IN THE SPECIFIC CONTEXT OF INTENDED USE AND DETERMINED APPROPRIATE BY THE USER.