

HOBART BROTHERS CO -- LOW HYDROGEN LOW ALLOY COVERED ELECTRODES T --  
3439-00-967-2759

===== Product Identification =====

Product ID:LOW HYDROGEN LOW ALLOY COVERED ELECTRODES T

MSDS Date:03/01/1988

FSC:3439

NIIN:00-967-2759

MSDS Number: BMTPG

=== Responsible Party ===

Company Name:HOBART BROTHERS CO

Address:600 WEST MAIN STREET

City:TROY

State:OH

ZIP:45373

Country:US

Info Phone Num:513-332-4000

Eme

rgency Phone Num:513-332-4000

CAGE:28835

=== Contractor Identification ===

Company Name:HOBART BROTHERS CO

Address:600 W MAIN ST HOBART SQUARE

Box:City:TROY

State:OH

ZIP:45373

Country:US

Phone:513-339-6000

CAGE:28835

===== Composition/Information on Ingredients =====

Ingred Name:TITANIUM DIOXIDE

CAS:13463-67-7

RTECS #:XR2275000

Other REC Limits:NONE SPECIFIED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:CALCIUM FLUORIDE

CAS:7789-75-5

RTECS #:EW1760000

O

ther REC Limits:NONE SPECIFIED  
OSHA PEL:2.5 MG/M3 AS F  
ACGIH TLV:2.5 MG/M3 AS F

Ingred Name:SILICA, CRYSTALLINE - QUARTZ  
CAS:14808-60-7  
RTECS #:VV7330000  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:SEE TABLE Z3  
ACGIH TLV:0.1 MG/M3 RDUST;9293

Ingred Name:IRON  
CAS:7439-89-6  
RTECS #:NO4565500  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:5 MG/M3  
ACGIH TLV:10 MG/M3 AS FE2O3

Ingred Name:MANGANESE (SARA III)  
CAS:7439-96-5  
RTECS #:OO9275000  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:(C) 5 MG/M3 DUST  
ACGIH TL  
V:5 MG/M3 DUST 9293

Ingred Name:SILICON  
CAS:7440-21-3  
RTECS #:VW0400000  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:MOLYBDENUM  
CAS:7439-98-7  
RTECS #:QA4680000  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:15 MG/M3 TDUST  
ACGIH TLV:10 MG/M3; 9293

Ingred Name:CHROMIUM (SARA III)  
CAS:7440-47-3  
RTECS #:GB4200000  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:1 MG/M3  
ACGIH TLV:0.5 MG/M3; 9192  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:NICKEL (SARA I

II)  
CAS:7440-02-0  
RTECS #:QR5950000  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9192

=====  
===== Hazards Identification =====

LD50 LC50 Mixture:UNCLASSIFIED WELDING FUMES=5MG/M3 PEL  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:CHROMIUM: MAY CAUSE LUNG CHANGES.  
COBALT: MAY CAUSE RESPIRATORY IRRITATION & DISEASE. IRON: MAY CAUSE  
X-RAY CHANGES OF THE LUNGS. MANGANESE: MAY CAUSE METAL FUME FEVER,  
AFFECT THE NERVOUS SYSTEM & RESPIRATORY SYSTEM DISEASE.  
MOLYBDENUM: MAY CAUSE IRRITATION. NICKEL: MAY CAUSE RESPIRATORY  
DISEASE & ALLERGIC SKIN RASH.  
Explanation of Carcinogenicity:NICKEL, COBALT-CHROMIUM ALLOYS, AND  
CHROMIUM HAVE BEEN IDENTIFIED BY IARC AND/OR NTP AS POTENTIAL  
CANCER CAUSING AGENTS.  
Effects of Overexposure:EXPOSURE TO WELDING FUMES MAY CAUSE METAL FUME  
FEVER WITH SYMPTOMS OF CHILLS, FEVER, NAUSEA,  
COUGH, DRY THROAT,  
WEAKNESS, MUSCLE ACHES, AND A SWEET OR METALLIC TASTE IN THE MOUTH.  
PROLONGED OR REPEATED EXPOSURE MAY CAUSE DIFFICULTY IN WALKING,  
WEAKNESS OR CRAMPS IN THE LEGS, HOARSENESS, MEMORY LOSS, SKIN  
SENSITIZATION.  
Medical Cond Aggravated by Exposure:PRE-EXISTING CHRONIC SKIN, EYE OR  
RESPIRATORY DISORDERS MAY BE AGGRAVATED IF INDIVIDUALS ARE  
REPEATEDLY OVEREXPOSED TO FUMES AND DUST.

=====  
===== First Aid Measures =====

First Aid:INHALATION: REMOVE TO FRESH AIR. CONSULT A PHYSICIAN. EYE:  
FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES. GET  
MEDICAL ATTENTION. SKIN: WASH WITH SOAP AND WATER. INGESTION: WHILE  
INGESTION OF LARGE ENOUGH QUANTITIES TO CAUSE HEALTH EFFECTS IS  
UNLIKELY, CONSULT A PHYSICIAN IF IT OCCURS.

=====  
===== Fire Fighting Measures =====

Extinguishing Media:USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY  
CHEMICAL.  
Fire Fighting Procedures:

WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS.  
Unusual Fire/Explosion Hazard:COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS.

===== Accidental Release Measures =====

Spill Release Procedures:CLEAN UP ANY GRINDING DUST OR WASTE RESIDUES AND PLACE IN SUITABLE DOT APPROVED CONTAINERS AND DISPOSE OF IN FULL COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. AVOID INHALATION AND SKIN EXPOSURE.

===== Handling and Storage =====

Handling and Storage Precautions:WEAR GLOVES AND FLAME RETARDANT CLOTHING WHEN CUTTING, GRINDING OR WELDING. DO NOT EXPOSE SKIN TO RADIATION WHEN HOT CUTTING OR WELDING.

Other Precautions:PROVIDE PROTECTIVE SCREENS TO SHIELD OTHERS. WHEN ELECTRODES AND FLUXES ARE CONSUMED, THE FUME AND GAS DECOMPOSITION PRODUCTS GENERATED ARE DIFFERENT IN FORM FROM THE INGREDIENTS LISTED. NEW COMPOUNDS NOT IN THE ELECTRODES MAY FORM.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:WEAR NIOSH APPROVED RESPIRATORS FOR PROTECTION AGAINST AIRBORNE DUST OR FUMES. RESPIRATORS SHOULD BE USED IN ACCORDANCE WITH 29CFR 1910.134.

Ventilation:USE LOCAL AND GENERAL VENTILATION TO KEEP AIRBORNE CONCENTRATIONS OF DUST OR FUMES BELOW THE TLV DURING USE.

Protective Gloves:WELDERS LEATHER GLOVES

Eye Protection:OSHA APPROVED GOGGLES/FACE SHIELD WITH LENS

Other Protective Equipment:BARRIER CREAMS MAY BE NECESSARY TO PREVENT SKIN SENSITIZATION AND DERMATITIS.

Work Hygienic Practices:WASH THOROUGHLY BEFORE EATING OR SMOKING. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

WELDING AND HOT CUTTING FUMES & GASES CANNOT BE CLASSIFIED SIMPLY. THEIR COMPOSITION AND QUANTITY ARE DEPENDENT ON THE METAL BEING WELDED, THE PROCEDURES, PROCESSES AND THE TYPE OF WIRE OR ELECTRODES USED. OTHER INFLUENCING FACTORS

S ARE THE PRESENCE OF  
CONTAMINANTS. CHLORINATED SOLVENTS MAY DECOMPOSE TO TOXIC GASES.

===== Physical/Chemical Properties =====

HCC:N1

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

STRONG OXIDIZING AGENTS

Stability Condition to Avoid: HIGH HEAT, OPEN FLAMES AND OTHER SOURCES  
OF IGNITION

Hazardous Decomposition Products: WELDING AND CUTTING OPERATION MAY  
INCLUDE OXIDES OF THE METALS, CHROMATE

S, FLUORIDES, COMPLEX

METALLICS, AND OZONE.

===== Disposal Considerations =====

Waste Disposal Methods: RECYCLE OR DISPOSE IN ACCORDANCE WITH FEDERAL,  
STATE & LOCAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department  
of Defense. The United States of America in no manner whatsoever,  
expressly or implied, warrants this information to be accurate and  
d

isclaims all liability for its use. Any person utilizing this  
document should seek competent professional advice to verify and  
assume responsibility for the suitability of this information to their  
particular situation.