

MSDS Safety Information

FSC: 3439  
NIIN: 00-967-2725  
MSDS Date: 04/15/1993  
MSDS Num: CDZWH  
Product ID: CODE ARC 8018-B2 MR  
MFN: 01  
Responsible Party  
Cage: 36232  
Name: LINCOLN ELECTRIC CO  
Address: 22801 ST CLAIR AVE  
City: CLEVELAND OH 44117-1199  
Info Phone Number: 216-481-8100  
Emergency Phone Number: 216-481-8100  
Published: Y

Contractor Summary

Cage: 36232  
Name: THE LINCOLN ELECTRIC CO  
Address: 22801 ST CLAIR AVE  
City: EUCLID OH 44117-1199  
Phone: 216-481-8100

Item Description Information

Item Name: ELECTRODE,WELDING

Ingredients

Cas: 7439-89-6  
RTECS #: NO4565500  
Name: IRON  
% Wt: 10  
OSHA PEL: 10 MG/M3 (MFR)  
ACGIH TLV: 10 MG/M3 (MFR)

Cas: 1317-65-3  
RTECS #: EV9580000  
Name: CALCIUM CARBONATE; (LIMESTONE)  
% Wt: 10  
OSHA PEL: 15 MG/M3 TDUST  
ACGIH TLV: 10 MG/M3 TDUST

Cas: 7789-75-5  
RTECS #: EW1760000  
Name: CALCIUM FLUORIDE; (FLUORIDES) (AS F)  
% Wt: <5  
OSHA PEL: 2.5 MG/M3 (MFR)  
ACGIH TLV: 2.5 MG/M3 (M

FR)

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Cas: 1344-09-8

Name: SODIUM SILICATE; (SILICATES AND OTHER BINDERS)

% Wt: <5

OSHA PEL: 10 MG/M3 (MFR)

ACGIH TLV: 10 MG/M3 (MFR)

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Cas: 1332-58-7

RTECS #: GF1670500

Name: CLAY (KAOLIN); (MINERAL SILICATES)

% Wt: <5

OSHA PEL: 15 MG/M3 TDUST

ACGIH TLV: 2 MG/M3 TDUST

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Cas: 13463-67-7

RTECS #: XR2275000

Name: TITANIUM OXIDE; (TITANIUM DIOXIDE)

% Wt: <5

OSHA PEL: 15 MG/M3 TDUST

ACGIH TLV: 10 MG/M3 TD

UST

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Cas: 7440-47-3

RTECS #: GB4200000

Name: CHROMIUM; (CHROMIUM AND CHROMIUM ALLOYS OR COMPOUNDS) (AS CR) (SARA 313)  
(CERCLA)

% Wt: 1

OSHA PEL: 1 MG/M3

ACGIH TLV: 0.5 MG/M3

EPA Rpt Qty: 1 LB

DOT Rpt Qty: 1 LB

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Cas: 7440-21-3

RTECS #: VW0400000

Name: SILICON; (SILICON AND/OR SILICON ALLOYS AND COMPOUNDS) (AS SI)

% Wt: 1

OSHA PEL: 15 MG/M3 TDUST

ACGIH TLV: 10 MG/M3 TDUST

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Cas: 1633-05-2

Name: STRONTIUM CA

RBONATE; (STRONTIUM COMPOUNDS (AS SR))

% Wt: 0.5

OSHA PEL: 10 MG/M3 (MFR)

ACGIH TLV: 10 MG/M3 (MFR)

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Cas: 7439-96-5

RTECS #: OO9275000

Name: MANGANESE; (MANGANESE AND/OR MANGANESE ALLOYS AND COMPOUNDS (AS MN))  
(SARA 313)

% Wt: 0.5

OSHA PEL: 5 MG/M3 DUST, C

ACGIH TLV: 5 MG/M3 DUST

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Cas: 7439-98-7

RTECS #: QA4680000

Name: MOLYBDENUM; (MOLYBDENUM ALLOYS (AS MO))

% Wt: 0.5

OSHA PEL: 10 PPM

ACGIH TLV: 10 PPM

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Cas: 14808-60-7

RTECS #: VV7330000

Name: SILICA, CRYSTALLINE - QUARTZ; (QUARTZ)

% Wt: <0.5

OSHA PEL: 0.1 MG/M3 (MFR)

ACGIH TLV: 0.1 MG/M3 RDUST

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Cas: 7439-89-6

RTECS #: NO4565500

Name: IRON; (CARBON STEEL CORE WIRE)

% Wt: 60

OSHA PEL: 10 MG/M3 (MFR)

ACGIH TLV: 10 MG/M3 (MFR)

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Name: SUPDAT:CHROMIUM, MANGANESE, POTASSIUM, SILICON, SODIUM & STRONTIUM.  
GASEOUS RXN PRODS MAY INCL CARBON MONOXIDE &

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Name: ING 14:CARBON DIOXIDE. OZONE & NITROGEN OXIDES MAY BE FORMED BY RADIA  
FROM THE ARC. FOR MORE INFO CONTACT NEHC (FP N).

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Name: EYE PROT:FULL LGTH FSHLD (FP N) W/FILTER LENS SHADE NUMBER 12/DARKER.  
SHIELD OTHER BY PROVIDING SCREENS & FLASH GOGGS.

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Name: OTHER PROT EQUIP:IF WELDING MUST BE PERFORMED IN DAMP LOCATIONS OR W/WET  
CLTHG, ON METAL STRUCTURES/WHEN IN

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Name: ING 17:CRAMPED POSITIONS

SUCH AS SITTING, KNEELING/LYING, IF THERE IS  
HIGH RISK OF UNAVOIDABLE/ACCIDENTAL CONT

Name: ING 18:WORKPIECE, USE FOLLOWING: SEMIAUTOMATIC DC WELDER, DC MANUAL  
(STICK) WELDER/AC WELDER W/REDUCE VOLTAGE CONTROL.

Name: EFTS OF OVEREXP:CALCIFICATION OF BONE & CALCIFICATION OF LIGAMENTS OF  
RIBS, PELVIS & SPINAL COLUMN. MAY CAUSE

Name: ING 20:SKIN RASH. CHROMIUM IS ON IARC & NTP LISTS AS POSI  
NG A CARCIN  
RISK TO HUMANS (MFR). ARC RAYS CAN INJURE

Name: ING 21:EYES & BURN SKIN. ELECTRIC SHOCK CAN KILL.

Health Hazards Data

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: YES

Carcinogenicity Inds - NTP: YES

IARC: YES

OSHA: NO

Effects of Exposure: FUMES & GASES CAN BE DANGEROUS  
TO YOUR HLTH.

ACUTE:OVEREXP TO WELDING FUMES MAY RSLT IN DISCOMFORT SUCH AS METAL FUME  
FEVER, DIZZ, NAUS OR DRYNESS/IRRIT OF NOSE, THROAT/EYES. EXPOS TO EXTREMELY  
HIGH L EVELS OF FLUORIDES CAN CAUSE ABDOM PAIN, DIARR, MUSCULAR WEAK &  
CONVLS. IN EXTREME CASES IT CAN CAUSE (EFTS OF OVEREXP)

Explanation Of Carcinogenicity: SILICA, CRYSTALLINE-QUARTZ:IARC MONO, VOL 68,  
1997, GROUP 1; NTP 7TH ANNUAL RPT ON CARCINS, 1994: (SUPP DATA)

Signs And Symptions Of Overexposure: HLTH HAZ:LOSS OF  
CONSCIOUSNESS &

DEATH. CHRONIC:OVEREXP TO WELDING FUMES CAN LEAD TO SIDEROSIS (IRON DEPOSITS  
IN LUNG) & MAY AFFECT PULM FUNC. MANGANESE OVEREXP CAN AFFECT CNS, RSLTG  
IN IMPAIRED SPEEC H & MOVEMENT. BRONCH & SOME LUNG FIBROSIS HAVE BEEN  
BEEN REPORTED. RPTD EXPOS TO FLUORIDES MAY CAUSE EXCESSIVE

Medical Cond Aggravated By Exposure: NONE SPECIFIED BY MANUFACTURER.

First Aid: CALL FOR MED AID. EMPLOY FIRST-AID TECHNIQUES REC BY THE AMERICAN  
RED CROSS. INGEST:CALL MD IMMED

(FP N). EYES:IMMED FLUSH W/POTABLE WATER FOR MIN OF 15 MINS, SEEK ASSISTANCE FROM MD (FP N). SKIN:FLUS H W/COPIOUS AMTS OF WATER. CALL MD (FP N). INHAL:IF BRTHG IS DFCLT GIVE OXYG. IF NOT BRTHG EMPLOY CPR TECHNIQUE. IN CASE OF ELEC SHOCK, TURN OFF POWER & FOLLOW REC TREATMENT. IN ALL CASES, CALL MD.

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Handling and Disposal  
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Spill Release Procedures: NONE SPECIFIED BY MANUFACTURER.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: DISPOSAL MUST BE I/A/W FEDERAL, STATE & LOCAL REGULATIONS (FP N). DISCARD ANY PRODUCT, RESIDUE, DISPOSABLE CONTAINER OR LINER AS ORDINARY WASTE IN AN ENVIRONMENTAL ACCEPTABLE MANNER UNLESS OTHERWISE NOTED.

Handling And Storage Precautions: TRAIN WELDER TO KEEP HIS HEAD OUT OF FUMES. TRAIN WELDER NOT TO PERMIT ELEC LIVE PARTS/ELECTRODES TO CONT SKIN, CLTHG/GLOVES IF THEY ARE WET.

Other Precautions: IN

SULATE FROM WORK & GROUND. READ & UNDERSTAND MFR'S INSTRUCTIONS & PREC LBL ON PROD. REQUEST MFR'S SFTY PUB E205. SEE ANSI Z49.1, "SFTY IN WELDING & CUTTING" PUBLISHED BY AWS, 550 N.W. LEJEUNE RD, MI AMI FL 33126 & OSHA PUB 2206 (SUPP DATA)

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Fire and Explosion Hazard Information  
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Extinguishing Media: MEDIA SUITABLE FOR SURROUNDING FIRE (FP N).

Fire Fighting Procedures:

USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT (FP N).

Unusual Fire/Explosion Hazard: NON-FLAMMABLE: WELDING ARC AND SPARKS CAN IGNITE COMBUSTIBLES AND FLAMMABLE PRODUCTS.

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Control Measures  
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Respiratory Protection: USE NIOSH APPROVED RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIED RESPIRATOR WHEN WELDING IN CONFINED SPACE OR GENERAL WORK AREA WHEN LOCAL EXHAUST OR VE

NTILATION DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation: USE ENOUGH VENT, LOCAL EXHAUST AT ARC OR BOTH TO KEEP FUMES & GASES FROM WORKER'S BREATHING ZONE & THE GENERAL AREA.

Protective Gloves: WELDER'S GLOVES.

Eye Protection: ANSI APPRVD CHEM WORKERS GOGGS &

Other Protective Equipment: ANSI APPRVD EYE WASH FOUNTAIN & DELUGE SHOWER (FP N). ARM PROTECTORS, APRONS, HATS, SHOULDER PROT, DARK CLTHG.

Work Hygienic Practices: NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health:

EXPLAN OF CARCIN:ANTIC TO BE CARCIN. OTHER  
PREC:(29CFR1910), U.S. GOVT PRINTING OFC, WASHINGTON, D.C. 20402 FOR MORE  
INFO. KEEP EXPOS AS LOW AS POSS. INDOORS, USE LOC EXHST; OUTDOORS, NIOSH  
APPRVD RES P MAY BE REQD. HAZ DECOMP PROD:PRIMARYLY IRON OXIDE &  
FLUORIDES; SECONDARILY COMPLEX OXIDES OF CALCIUM,

Physical/Chemical Properties

Appearance and Odor: NONE SPECIFIED BY M  
ANUFACTURER.

Reactivity Data

Stability Indicator: YES  
Stability Condition To Avoid: NONE SPECIFIED BY MANUFACTURER.  
Materials To Avoid: NONE SPECIFIED BY MANUFACTURER.  
Hazardous Decomposition Products: WELDING FUMES & GASES CANNOT BE CLASSIFIED  
SIMPLY. REAS EXPECTED FUME CONSTITUENTS OF THIS PROD WOULD INCL: (SUPP DATA)  
Hazardous Polymerization Indicator: NO  
Conditions To Avoid Poly  
merization: NOT RELEVANT

Toxicological Information

Ecological Information

MSDS Transport Information

Regu  
latory Information

Other Information

Transportation Information

Responsible Party Cage: 36232  
Trans ID NO: 95783  
Product ID: CODE ARC 8018-B2 MR  
MSDS Prepared Date: 04/15/1993  
Review Date: 10/14/1997  
MFN: 1  
Multiple K

IT Number: 0  
Review IND: Y

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Detail DOT Information

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DOT PSN Code: ZZZ  
DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

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Detail IMO Information

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IMO PSN Code: ZZZ  
IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION

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Detail IATA Information

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IATA PSN Code: ZZZ  
IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

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Detail AFI Information

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AFI PSN Code: ZZZ  
AFI Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

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HAZCOM Label

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Product ID: CODE ARC 8018-B2 MR  
Cage: 36232  
Company Name: THE LINCOLN ELECTRIC CO  
Street: 22801 ST CLAIR AVE  
City: EUCLID OH  
Zipcode: 44117-1199  
Health Emergency Phone: 216-481-8100  
Label Required IND: Y  
Date Of Label Review: 07/14/1997  
Status Code: C  
Label Date: 07/14/1997  
Origination Code: G  
Chronic Hazard IND: Y  
Eye Protection IND: YES  
Skin Protection IND: YES  
Signal Word: WARNING  
Respiratory Protection IND: YES  
Health Hazard: Moderate

Contact Hazard: Moderate

Fire Hazard: None

Reactivity Hazard: None

Hazard And Precautions: DECOMPOSITION PRODUCTS MAY BE HAZARDOUS.

ACUTE:DISCOMFORT, METAL FUME FEVER, DIZZINESS, NAUSEA OR DRYNESS OR IRRITATION OF NOSE, THROAT OR EYES. ABDOMINAL PAIN, DIARRHEA, MUSCULAR WEAKNESS, CONVULSION S, LOSS OF CONSCIOUSNESS, DEATH. CHRONIC:CANCER HAZARD. CONTAINS SILICA, CRYSTALLINE-QUARTZ, WHICH IS LISTED AS AN ANIMAL LUNG CARCINOGEN (FP N). SIDEROSIS, PULMONARY FUNCTION EFFECTS, CENTRAL NERVOUS SYSTEM EFFECTS, BRONCHITIS, LUNG FIBROSIS, CALCIFICATION OF BONE AND LIGAMENTSOF RIBS, PELVIS AND SPINAL COLUMN. SKIN RASH. ARC RAYS CAN INJURE EYES AND BURN SKIN. ELECTRIC SHOCK CAN KILL.

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