

INWELD MFG CORP -- ER 5556, INWELD ALUMINUM WIRES -- 3439-00-803-9495

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

Product ID:ER 5556, INWELD ALUMINUM WIRES

MSDS Date:09/01/1999

FSC:3439

NIIN:00-803-9495

Status Code:A

MSDS Number: CLMNB

=== Responsible Party ===

Company Name:INWELD MFG CORP

Address:3962 PROTLAND ST

Box:40

City:COPLAY

State:PA

ZIP:18037-0040

Country:US

Info Phone Num:610-261-1900

Emergency

Phone Num:610-261-1900

CAGE:66376

=== Contractor Identification ===

Company Name:BLACK AND CO

Address:5351 W MINNESOTA ST

Box:UNKNOW

City:INDIANAPOLIS

State:IN

ZIP:46241

Country:US

Phone:317-243-8676

Contract Num:SP0490-00-D-4063

CAGE:00WU8

Company Name:INWELD MFG CORP

Address:3962 PORTLAND ST

Box:40

City:COPLAY

State:PA

ZIP:18037-0040

Country:US

Phone:610-261-1900

CAGE:66376

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

Ingred Name:ALUMINIUM

CAS:7429-90-5

RTECS #:BD0330

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Minumum % Wt:85.

Maxumum % Wt:99.5

OSHA PEL:15 MG/M3

ACGIH TLV:10 MG/M3

Ingred Name:BERYLLIUM

CAS:7740-41-7

RTECS #:DS1750000

Fraction by Wt: 0.0008%

OSHA PEL:SEE TABLE Z-2

ACGIH TLV:0.002 MG/M3

ACGIH STEL:0.002 MG/M3

EPA Rpt Qty:10 LBS

DOT Rpt Qty:10 LBS

Ingred Name:CHROMIUM

CAS:7440-47-3

RTECS #:GB4200000

= Wt:.35

OSHA PEL:1 MG/M3

ACGIH TLV:0.5 MG/M3

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:COPPER

CAS:7440-50-8

RTECS #:GL5325000

= Wt:6.8

OSHA PEL:1 MG/M3

ACGIH TLV:0.2 MG/M3 AS FUME

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

= Wt:.8

ACGIH TLV:5 MG/M3 AS OXIDE

Ingred Name:MAGNESIUM .

CAS:1309-48-4

RTECS #:OM3850000

= Wt:5.5

OSHA PEL:15 MG/M3

ACGIH TLV:10 MG/M3 OXIDE FUME

Ingred Name:MANGANESE

CAS:7439-96-5

RTECS #:OO9275000

= Wt:1.

OSHA PEL:C5 MG/M3

ACGIH TLV:1.5 MG/M3

Ingred Name:SILICON

CAS:7440-21-3

RTECS #:VW0400000

= Wt:13.

.2
OSHA PEL:15 MG/M3
ACGIH TLV:5 MG/M3 OXIDE FUME

Ingred Name:COBALT
CAS:7440-48-4
RTECS #:GF8750000
OSHA PEL:0.1 MG/M3
ACGIH TLV:0.05 MG/M3

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Hazards Identification
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Health Hazards Acute and Chronic:SHORT TERM (ACUTE) OVEREXPOSURE TO WELDING FUMES MAY RESULT IN DISCOMFORT SUCH AS DIZZINESS, NAUSEA, AND DRYNESS OR IRRITATION OF THE NOSE, THROAT, OR EYES. LONG TERM (CHRONIC) OVEREXPOSURE TO WELDING FUMES MAY LEAD TO SIDEROSIS (IRON DEPOSITS IN THE LUNG) AND IS BELIEVED BY SOME INVESTIGATORS TO AFFECT PULMONARY FUNCTION. ARC RAYS CAN INJURE EYES AND BURN SKIN. ELECTRIC SHOCK CAN KILL.
Effects of Overexposure:DIZZINESS, NAUSEA, AND DRYNESS OR IRRITATION OF THE NOSE, THROAT, OR EYES.
Medical Cond Aggravated by Exposure:AGGRAVATION OF PREEXISTING RESPIRATORY OR ALLERGIC CONDITIONS MAY OCCUR IN SOME WORKERS.

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First Aid Measures
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First Aid:CALL FOR MEDICAL AID. EMPLOY FIRST AID TECHNIQUES RECOMMENDED BY THE AMERICAN RED CROSS. FOR SKIN CONTACT, REMOVE PARTICLES BY THOROUGHLY WASHING WITH SOAP AND WATER. FOR EYE CONTACT, FLUSH WITH WATER FOR AT LEAST 15 MINUTES, GET MEDICAL ATTENTION. FOR INHALATION, REMOVE FROM EXPOSURE, GET MEDICAL ATTENTION IF EXPERIENCING BREATHING DIFFICULTY.

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Fire Fighting Measures
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Fire Fighting Procedures:REFER TO AMERICAN NATIONAL STANDARD Z-49.1 FOR FIRE PREVENTING DURING THE USE OF WELDING PROCEDURES.
Unusual Fire/Explosion Hazard:THESE PRODUCTS AS SHIPPED ARE NONHAZARDOUS, NONFLAMMABLE, NONEXPLOSIVE, AND NONREACTIVE. WELDING ARC AND SPARKS CAN IGNITE COMBUSTIBLES AND FLAMMABLES.

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Accidental Release Measures
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Spill Release Procedures:NOT APPLICABLE.

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Handling and Storage
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Handling and Storage Precautions:READ AND UNDERSTAND THE MANUFACTURER'S INSTRUCTIONS

NS AND THE PRECAUTIONARY LABEL ON THIS PRODUCT. SEE AMERICAN NATIONAL STANDARD Z-49.1, SAFETY IN WELDING AND CUTTING, PUBLISHED BY THE AMERICAN WELDING SOCIETY, P.O. BPX 35410, MIAMI, FL 33135 AND OSHA PUBLICATION 2206 (29 C.F.R. 1910), U.S.

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

Respiratory Protection:USE RESPIRABLE FUME RESPIRATOR OR AIR SUPPLIES RESPIRATOR WHEN WELDING IN CONFINED SPACE OR WHERE LOCAL EXHAUST OR VENTILATION DOES NOT KEEP EXPOSURE BELOW TLV.

Ventilation:USE ENOUGH VENTILATION, LOCAL EXHAUST AT THE ARC, OR BOTH, TO KEEP THE FUMES AND GASES BELOW THE TLV'S IN THE WORKERS BREATHING ZONE AND THE GENERAL AREA.

Protective Gloves:WELDERS GLOVES AND A PROTECTIVE FACE SHIELD.

Eye Protection:HELMET OR USE FACE SHIELD WITH FILTER LENS.

Other Protective Equipment:WEAR HEAD, HAND AND BODY PROTECTION THAT HELP TO PREVENT INJURY FROM RADIATION, SPARKS AND ELECTRICAL SHOCK. SEE ANSI Z-49.1.

Work Hygienic Practices:A

T A MINIMUM (WELDER'S GLOVES, PROTECTIVE FACE SHIELD, ARM/SHOULDER PROTECTORS, HATS, AS WELL AS DARK SUBSTANTIAL CLOTHING). TRAIN THE WELDER NOT TO TOUCH LIVE ELECTRICAL PARTS & TO INSULATE HIMSELF.

Supplemental Safety and Health

VENTILATION: TRAIN THE WELDING TO KEEP HIS HEAD OUT OF THE FUMES. EYE PROTECTION: AS A RULE OF THUMB, START WITH A SHADE WHICH IS TOO DARK TO SEE THE WELD ZONE. THEN GO TO THE NEXT LIGHTER SHADE WHICH GIVES SUFFICIENT VIEW OF WELD ZONE. PROVIDE PROTECTIVE SCREENS AND FLASH GOGGLES, IF NECESSARY, TO SHIELD OTHERS.

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

HCC:N1

Melt/Freeze Pt:>521.1C, 970.F

M.P/F.P Text:970-1215

Spec Gravity:2.5-2.9

Solubility in Water:NIL

Appearance and Odor:SOLID, METALLIC COLOR, NO ODOR.

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

Hazardous Decomposition Products:REASONABLY EXPETED FUMES/GASES WOULD INCLUDE METAL FUMES, OXIDES OF ALUMINUM & MAGNESIUM, C

ARBON

MONOXIDE, CARBON DIOXIDE, OZONE, NITROGEN OXIDES, INFRA-RED RADIATION, & ULTRA-VIOLET RADIATION.

===== Toxicological Information =====

Toxicological Information:THRESHOLD LIMIT VALUE: THE ACGIH RECOMMENDED GENERAL LIMIT FOR WELDING FUME NOC (NOT OTHYERWISE CLASSIFID) IS 5 MG/M3. THE ACGIH 1984-85 PREFACE STATES: :THE TLV-TWA SHOULD BE USED AS GUIDES IN THE CO NTROL OF HEALTH HAZARDS AND SHOULD NOT BE USED AS FIRM LINES BETWEEN SAFE AND DANGEROUS CONCENTRATIONS".

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSABLE CONTAINER, OR LINER IN AN ENVIRONMENTALLY ACCEPTABLE MANNER, IN FULL COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

===== Other Information =====

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