

THERMACOTE-WELCO CO SUB OF FOSTER WHEELER CORP -- ALUMINUM 4043,1100,2319,4047 --
3439-01-323-9369

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

Product ID:ALUMINUM 4043,1100,2319,4047

MSDS Date:07/05/1990

FSC:3439

NIIN:01-323-9369

MSDS Number: BWFQN

=== Responsible Party ===

Company Name:THERMACOTE-WELCO CO SUB OF FOSTER WHEELER CORP

Address:1051 YORK ROAD

Box:828

City:KINGS MOUNTAIN

State:NC

ZIP:28086

Cou

ntry:US

Info Phone Num:800-424-9300(CHEMTREC)

Emergency Phone Num:800-424-9300(CHEMTREC)

CAGE:24559

=== Contractor Identification ===

Company Name:THERMACOTE-WELCO CO SUB OF FOSTER WHEELER CORP

Address:YORK RD

Box:828

City:KINGS MOUNTAIN

State:NC

ZIP:28086

Country:US

CAGE:24559

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

Ingred Name:ALUMINUM (SARA III) BASE METAL

CAS:7429-90-5

RTECS #:BD0330000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15MG/M3 DUST/5 FUME

ACGIH TLV:1

0MG/M3 DUST; 9394

Ingred Name:COBALT (SARA III)

CAS:7440-48-4

RTECS #:GF8750000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.05 MG/M3

ACGIH TLV:0.05 MG/M3;DUST 9394

Ingred Name:COPPER (SARA III)

CAS:7440-50-8

RTECS #:GL5325000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.1MG/M3 FUME/1 DUST

ACGIH TLV:0.2 MG/M3 FUME; 9394

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:IRON OXIDE

CAS:1309-37-1

RTECS #:NO7400000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:10 MG/M3 (FE)

ACGIH TLV:5MG(FE)/M

3FUME,B2;94

Ingred Name:MAGNESIUM OXIDE

CAS:1309-48-4

RTECS #:OM3850000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:10 MG/M3 PARTICULATE

ACGIH TLV:10 MG/M3, FUME; 9394

Ingred Name:MANGANESE (SARA III)

CAS:7439-96-5

RTECS #:OO9275000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:C 5 MG/M3

ACGIH TLV:5 MG/M3, DUST; 9394

Ingred Name:SILICON

CAS:7440-21-3

RTECS #:VW0400000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:10 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9394

Ingred Name:SILVER (SARA III)

CAS:7440

-22-4
RTECS #:VW3500000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.01 MG/M3
ACGIH TLV:0.1 MG/M3; 9394
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:TIN
CAS:7440-31-5
RTECS #:XP7320000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:2 MG/M3
ACGIH TLV:2 MG/M3; 9394

Ingred Name:ZINC OXIDE
CAS:1314-13-2
RTECS #:ZH4810000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10MG/M3 TDUST; 9394

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

Routes of Entry: Inhalation: YES Skin: YES Ingestion: NO
Reports of Carcinogenicity: NTP: NO IARC: NO OSHA: NO
Health Hazards Acute and Chronic: EYES: MAY IRRITATE WHEN WELDING OR PLASMA CUTTING. INHAL: IS NOT LIKELY UNLESS MATERIAL MACHINED, WELDED OR REMELTED. EXPO TO ZINC OXIDE FUME CAN RESULT IN "ZINC CHILLS" (METAL FUME FEVER). RECOVERY IS USUALLY COMPLETE IN 24-48 HRS. OVEREXPO TO CU FUME CAN CAUSE UPPER RESP TRACT IRRIT.
Effects of Overexposure: ZINC CHILLS (METAL FUME FEVER), EYE IRRITATION, UPPER RESP TRACT IRRIT.
Medical Cond Aggravated by Exposure: NONE SPECIFIED BY MFG.

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

First Aid: SKIN: REMOVE PARTICLES BY THOROUGHLY WASHING W/SOAP & WATER. EYE: FLUSH W/WATER FOR @LEAST 15MINS. GET MED ATTN IF IRRIT PERSISTS. INHAL: REMOVE FROM EXPOSURE. GET MED ATTN IF EXPERIENCING BREATHING DIFFICULTY.

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

Extinguishing Media: DRY POWDER OR SAND.
Fire Figh

ting Procedures:DO NOT USE WATER OR HALOGEN ON DUST FUMES.
Unusual Fire/Explosion Hazard:DAMP ALUMINUM DUST MAY SPONTANEOUSLY HEAT WITH LIBERATION OF HYDROGEN TO FORM EXPLOSIVE AIR MIXTURES.

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Handling and Storage
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Handling and Storage Precautions:FINELY DIVIDED AL WILL FORM EXPLO MIX IN AIR.ALSO FORM EXPLO MIX W/HYDROGEN.DO NOT TOUCH CAST AL METAL/HEATED AL PROD W/O KNOWNING METAL TEMP.(SUPPLE)

Other Precautions:WHEN REMELTING AL SCRAP E XTRAPPED MOISTURE/PRESENCE

OF STRONG OXIDIZERS(AMMONIUM NITRATE)COULD CAUSE EXPLO.THIS APPLIED TO COLLECTION OF MOISTURE IN SAW CAVITIES AS WELL.MOISTURE MUST BE DRIVEN OFF PR IOR TO REMELTING.LIMIT VAP DEGREASER.

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Exposure Controls/Personal Protection
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Respiratory Protection:REQUIRED-DETERMINED BY NATURE OF THE PROCESSING ACTIVITY.

Ventilation:TO BE DETERMINED BY THE NATURE OF THE PROCESSING ACTIVITY BEING PERFORMED.

Protective Gloves:DETERMINED BY NATURE OF PROCESSING ACTIV

Eye Protection:DETERMINED BY NATURE OF PROCESSING ACTIV

Other Protective Equipment:APPROPRIATE PERSONAL PROTECTIVE EQPMT IS REQUIRED WHEN MELTING/CASTING/MACHINING/FORGING/OTHERWISE PORCESSING.

Work Hygienic Practices:TO BE DETERMINED BY THE NATURE OF THE PROCESSING ACTIVITY BEING PERFORMED.

Supplemental Safety and Health

HANDLE/STGE PRECAUT:AL EXPERIENCES NO COLOR CHANGE DURING HEATING.IF METAL IS HOT & TOUCHED BURNS CAN RESULT.AL POWDER MUST BE PK G/SHIP

AS FLAMM SOLID UN1396.HARD ALLOY INGOTS IN 2000/7000 SERIES MUST BE STRESS RELIEVED TO PREVETN EXPLO/VIOL CRACK WHEN SAW.AL SCRAPE CONTAMIN >1% OIL WILL GENERATE OIL VAP WHEN MELTING.

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Physical/Chemical Properties
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HCC:N1

Melt/Freeze Pt:M.P/F.P Text:950F,510C

Spec Gravity:2.5-2.9

Solubility in Water:NIL

Appearance and Odor:METALLIC APPEARANCE, NO ODOR.

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Stability and Reactivity Data
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HALOGEN ACIDE &

NAOH IN CONTACT W/AL GENERATE EXPLO MIX IN AIR IN PRESENCE OF BROMATES,IODATES,AMMONIUM NITRITE.

Stability Condition to Avoid:PER MSDS:N/A ALSO PER MSDS:MOISTURE W/STRONG OXIDIZERS.

Hazardous Decomposition Products:WELDING AL ALLOYS MAY GENERATE CARBON MONOXIDE,CARBON DIOXIDE,OZONE,NITROGEN OXIDES,INFRA-RED/UV RADIATION,METAL FUMES.

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

Waste Disposal Methods:USED/UNUSED PRODUCT SHOULD BE TESTED TO DETERMINE HAZARDOUSITY STATUS & DISPOSAL REQMTS UNDER LOCAL, STATE OR FEDERAL REGULATIONS.

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