

KAISER ALUMINUM & CHEMICAL CORP -- ALUMINUM ALLOYS CONTAINING CHROMIUM (KDS-4) --
3439-01-218-5212

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

Product ID:ALUMINUM ALLOYS CONTAINING CHROMIUM (KDS-4)

MSDS Date:07/01/1993

FSC:3439

NIIN:01-218-5212

MSDS Number: BTHPT

=== Responsible Party ===

Company Name:KAISER ALUMINUM & CHEMICAL CORP

Address:6177 SUNOL BLVD

City:PLEASANTON

State:CA

ZIP:94566-7769

Country:U

S

Info Phone Num:510-847-5892

CAGE:9B092

=== Contractor Identification ===

Company Name:KAISER ALUMINUM & CHEMICAL CORP

Address:OLD HIGHWAY 60

Box:City:MULBERRY

State:FL

ZIP:33860

Country:US

Phone:941-425-1195

CAGE:9B092

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

Ingred Name:ALUMINUM (SARA III) THIS IS BASE METAL FOR THIS PRODUCT.

CAS:7429-90-5

RTECS #:BD0330000

Fraction by Wt: 80-99.7%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 DUST

ACGIH TLV:10 MG/M3 DUST;

9394

Ingred Name:THE NEXT 8 INGREDIENTS ARE ALLOYING ELEMENTS IN THE PRODUCT
RTECS #:9999999ZZ
Other REC Limits:NONE RECOMMENDED

Ingred Name:CHROMIUM (SARA III)
CAS:7440-47-3
RTECS #:GB4200000
Fraction by Wt: 0.1-1.0%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1 MG/M3
ACGIH TLV:0.5 MG/M3; 9394
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:COBALT (SARA III),DUST AND FUME
CAS:7440-48-4
RTECS #:GF8750000
Fraction by Wt: 1-10%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.1 MG/M3
ACGIH TLV:0.05
MG/M3;DUST 9394

Ingred Name:COPPER (SARA III)
CAS:7440-50-8
RTECS #:GL5325000
Fraction by Wt: 1-10%
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 FUME
CAS:1309-37-1
RTECS #:NO7400000
Fraction by Wt: 1-10%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:10 MG/M3 (FE)
ACGIH TLV:5MG/M3(FE)FUME,B2;94

Ingred Name:MAGNESIUM OXIDE
CAS:1309-48-4
RTECS #:OM3850000
Fraction by Wt: 1-10%
Other

REC Limits:NONE RECOMMENDED
OSHA PEL:15 MG/M3 PARTICULATE
ACGIH TLV:10 MG/M3;TDUST; 9394

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Fraction by Wt: 1-10%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:C 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9394

Ingred Name:SILICON
CAS:7440-21-3
RTECS #:VW0400000
Fraction by Wt: 10-20%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9394

Ingred Name:ZINC OXIDE
CAS:1314-13-2
RTECS #:ZH4810000
Fraction by Wt:
1-10%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9394

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:EYES: MAY IRRITATE EYES WHEN WELDING
OR PLASMA CUTTING. SKIN: NOT LIKELY TO BE A HEALTH PROBLEM.
INHALATION: NOT LIKELY UNLESS MACHINE
D, WELDED OR REMELTED.
EXPOSURE TO ZINC OXIDE FUME CAN RESULT IN " ZINC CHILLS" (METAL
FUME FEVER). INGESTION: NOT LIKELY TO BE A HEALTH PROBLEM.
Explanation of Carcinogenicity:PER MFG. MSDS: CHROMIUM IS LISTED IN
NTP. ITS PRESENCE IS NOT EXPECTED A CARCINOGENIC RISK. LOW
CONCENTRATION .
Effects of Overexposure:UPPER RESPIRATORY TRACT IRRITATION, EYE
IRRITATION, SKIN IRRITATION, FEVER, CHILLS, NAUSEA, VOMITING AND
MUSCULAR PAIN. RECOVERY IS USUALLY COMPLETE IN 24 TO 48 H

OURS.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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First Aid Measures
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First Aid:SKIN: REMOVE PARTICLES BY THOROUGHLY WASHING WITH SOAP AND WATER. EYES: FLUSH WITH WATER FOR AT LEAST 15 MINUTES. GET PHYSICIAN IF IRRITATION PERSISTS. INHALATION: REMOVE FROM EXPOSURE. GET PHYSICIAN IF EXPERIENCING BREATHING DIFFICULTY. INGESTION: CALL PHYSICIAN IMMEDIATELY.

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Fire Fighting Measures
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Flash Point:NONFLAMMABLE

Extinguishing Media:DRY POWDER OR SAND. DO NOT USE WATER OR HALOGEN ON DUST FIRES.

Fire Fighting Procedures:WEAR NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE EQUIPMENT

Unusual Fire/Explosion Hazard:DAMP ALUMINUM DUST MAY SPONTANEOUSLY HEAT WITH LIBERATION OF HYDROGEN TO FORM EXPLOSIVE AIR MIXTURE. FINELY DIVIDED ALUMINUM WILL FORM EXPLOSIVE MIXTURE IN AIR.

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Accidental Release Measures
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Spill Release

Procedures:NOT APPLICABLE.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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Handling and Storage
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Handling and Storage Precautions:ACIDS & BASES IN CONTAINER WITH ALUMINUM MAY GENERATE EXPLOSIVE MIXTURES WITH HYDROGEN. DO NOT TOUCH CAST ALUMINUM METAL OR HEATED ALUMINUM IF HOT.

Other Precautions:FINELY DIVIDED ALUMINUM WILL FORM EXPLOSIVE MIXTURE IN AIR. IT WILL ALSO FORM EXPLOSIVE MIXTURE IN AIR IN PRESENCE OF BROMATES, IODATES, OR AMMONIUM NITRATE.

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Exposure Controls/Personal Protection
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Respiratory Protection:NIOSH/MSHA APPROVED RESPIRATOR APPROPRIATE FOR EXPOSURE OF CONCERN.

Ventilation:NONE SPECIFIED BY MANUFACTURER.

Protective Gloves:IMPERVIOUS GLOVES.

Eye Protection:CHEMICAL WORKERS GOGGLES.

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

ACCUMULATION OF ALUMINUM FINES COULD RESULT

IN A POTENTIAL DEGREASER

FIRE OR EXPLOSION. VAPOR DEGREASER MUST BE PROPERLY MAINTAINED TO
LIMIT THE RISK OF EXPLOSION.

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

HCC:N1

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

Spec Gravity:2.5-2.9

Solubility in Water:NEGLIGIBLE

Appearance and Odor:METALLIC APPEARANCE WITH NO ODOR.

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

Stability Indicator/Materials to Avoid:YES

ANHYDROUS BROMINE.

Stability Conditio

n to Avoid:ACIDS AND BASES IN CONTACT WITH ALUMINUM

MAY GENERATE EXPLOSIVE MIXTURES WITH HYDROGEN.

Hazardous Decomposition Products:WELD OF ALUMINUM ALLOYS MAY GENERATE
CARBON MONOXIDE, CARBON DIOXIDE, OZONE, NITROGEN OXIDES, INFRA-RED
RADIATION.

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

Waste Disposal Methods:USED OR UNUSED PRODUCT SHOULD BE TESTED TO
DETERMINE HAZARD STATUS AND DISPOSAL REQUIREMENTS UNDER FEDERAL,
STATE AND LOCAL LAWS AND REGULAT
IONS. DISPOSER MUST COMPLY WITH
FEDERAL, STATE AND LOCAL DIS POSAL OR DISCHARGE LAWS.

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