

IRELAND ALLOYS INC -- STELLITE 30, COBALT BASE ALLOY -- 3439-01-357-7860

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Product Identification
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Product ID:STELLITE 30, COBALT BASE ALLOY

MSDS Date:11/21/1985

FSC:3439

NIIN:01-357-7860

Status Code:A

MSDS Number: CLPPD

=== Responsible Party ===

Company Name:IRELAND ALLOYS INC

Box:41000

City:HOUSTON

State:TX

ZIP:77240-1000

Country:US

Info Phone Num:713-937-1111

Emergency Phone Num:713-93

7-1111

CAGE:1DWT5

=== Contractor Identification ===

Company Name:IRELAND ALLOYS INC

Box:41000

City:HOUSTON

State:TX

ZIP:77240-1000

Country:US

Phone:713-937-1111

CAGE:1DWT5

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Composition/Information on Ingredients
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Ingred Name:CHROMIUM

CAS:7440-47-3

RTECS #:GB4200000

= Wt:26.

OSHA PEL:1 MG/M3

ACGIH TLV:0.5 MG/M3

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:COBALT

CAS:7440-48-4

RTECS #:GF8750000

= Wt:50.

OSHA PEL:0.1 MG/M3

ACGIH TLV:0.05 MG/M3

Ingred Name:IRON

CAS:1

309-37-1
RTECS #:NO7400000
= Wt:2.
OSHA PEL:NONE
ACGIH TLV:NONE

Ingred Name:NICKEL
CAS:7440-02-0
RTECS #:QR5950000
= Wt:15.
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

Ingred Name:CARBON
CAS:7440-44-0
RTECS #:FF5250000
= Wt:.45

Ingred Name:MOLYBDENUM
CAS:7439-98-7
RTECS #:QA4680000
= Wt:6.
OSHA PEL:15 MG/M3
ACGIH TLV:10 MG/M3

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

Reports of Carcinogenicity:NTP:UNKNOWN IARC:YES

Health Hazards Ac

ute and Chronic:SHORT TERM EXPOSURE-METALLIC TASTE;

NAUSEA; TIGHTNESS OF CHEST; FEVER; IRRITATION OF EYES, NOSE, THROAT AND SKIN; LOSS OF CONSCIOUSNESS/DEATH DUE TO WELDING/REMELT GASES OR LACK OF OXYGEN. LONG TERM E XPOSURE- ADVERSE EFFECTS MAY RESULT FROM LONG TIME EXPOSURE TO FUMES, GASES OR DUSTS. THESE EFFECTS MAY INCLUDE SKI SENSITIZATION, NEUROLOGICAL DAMAGE, AND RESPIRATORY DISEASE SUCH AS BRONCHIAL ASTHMA , LUNG FIBROSIS OR PNEUMOCONIOSIS.

Explanation of Carcinog

enicity:NICKEL AND CHROMIUM HAVE BEEN DETERMINED

BY THE IARC TO BE SUSPECTED CARCINOGENS.

Effects of Overexposure:SHORT TERM EXPOSURE-METALLIC TASTE; NAUSEA;

TIGHTNESS OF CHEST; FEVER; IRRITATION OF EYES, NOSE, THROAT AND SKIN; LOSS OF CONSCIOUSNESS/DEATH DUE TO WELDING/REMELT GASES OR LACK OF OXYGEN. LONG TERM E XPOSURE- ADVERSE EFFECTS MAY RESULT FROM LONG TIME EXPOSURE TO FUMES, GASES OR DUSTS. THESE EFFECTS MAY INCLUDE SKI SENSITIZATION, NEUROLOGICAL DAMAGE, AND RESPI

RATORY

DISEASE SUCH AS BRONCHIAL ASTHMA , LUNG FIBROSIS OR PNEUMOCONIOSIS.
Medical Cond Aggravated by Exposure:AGGRAVATION OF PRE-EXISTING
RESPIRATORY OR ALLERGIC CONDITIONS MAY OCCUR IN SOME WORKERS.

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First Aid Measures
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First Aid:REMOVE VICTIM FROM EXPOSURE AND OBTAIN PROMPT MEDICAL
ATTENTION. IF VICTIM IS UNXONSCIOUS, ADMINISTER OVYGEN, IF NOT
BREATHING, RESUSCIATATE IMMEDIATELY.

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Fire Fighting Measures
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Flash Point:NON-FLAMMABLE
Fire Fighting Procedures:SOLID FORMS-NON-FLAMMABLE.
Unusual Fire/Explosion Hazard:SHAVINGS OR BORINGS-IN EXTREME CASES, THE
CUTTING OIL CAN IGNITE, BUT THE METAL ITSELF WILL NOT.

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Accidental Release Measures
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Spill Release Procedures:RESIDUE FROM CUTTING OR GRINDING SHOULD BE
SWEPT OR VACUUMED AND PLACED IN SUITABLE CONTAINERS FOR DISPOSAL BY
LOCAL, STATE OR FEDERAL WASTE DISPOSAL REGULATIONS.

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Handling and Storage
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Other Precautions:PEL/TLV EXPOSURES SHOULD BE KEPT BELOW RECOMMENDED
RECOMMENDATIONS BY OSHA AND ASGIH TO ENSURE PROPER HEALTH
PROTECTION OF WORKER.

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Exposure Controls/Personal Protection
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Respiratory Protection:WHEN EXPOSURE LIMITS ARE EXCEEDED, USE PROPER
APPROVED VENTILATOR.
Ventilation:USE LOCAL EXHAUST WHDN CUTTING, GRINDING, WELDING, OR
REMELTING.
Protective Gloves:SHOULD BE US
ED WHEN CUTTING, GRINDING OR WELDING.
Eye Protection:SHOULD BE USED WHEN CUTTING, GRINDING OR WELDING.
Work Hygienic Practices:SHAVINGS OR TURNINGS CONTAINING CUTTING OILS
SHOULD NOT BE ALLOWED TO CONTACT THE SKIN FOR PROLONGED PERIODS.
INADVERTENT SHORT TERM CONTACT IS HARMLESS.
Supplemental Safety and Health
PHYSICAL DATA-COBALT BASE ALLOY PRODUCTS ARE SHIPPED AS SOLID FORMS, OR
AS METAL SHAVINGS OR BOINGS. THE SHAVING OR BORINGS WILL EITHER BE
DRY & COMPLETELY FREE OF CUTTING

OIL, OR WILL CONTAIN A SMALL % OF
WATER SOLUBLE CUTTING OIL. (WHICH IS USED AS A CUTTING TOOL
LUBRICANT WHEN SOLID FORMS ARE MACHINED TO FINAL SIZE).

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

HCC:N1

Melt/Freeze Pt:=1495.C, #####F

Appearance and Odor:SILVER-GRAY METAL.

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

COBALT IS INCOMPATIBLE WITH ACETYLENE, HYDRAZINE, NITRATES AND
OXIDANTS.

Hazardous Decomposition Products:METAL PRODUCT

S THESELVES ARE NOT

REACTIVE, HOWEVER, CAUTION MUST BE TAKEN WHEN WELDING AND REMELTING
DUE TO FUMES AND GASES.

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

Toxicological Information:PHYSIOLOGICAL EFFECTS-COBALT CAUSES A
DERMATITIS OF THE ALLERGIC SENSITIVITY TYPE AT POINTS OF FRICTION.
COBALT TOXICITY ALSO RESULTS IN A PROGRESSIVE, DIFFUSE,
INTERSTITIAL PNEUMONIA WITH A NON-PRODUCTIVE COUGH, DYSPNEA ON
EXERTION, INTERSTITIAL FIBROSIS & CELL DAM

AGE. OTHER WORKERS HAVE

EXPERIENCED A SENSITIZED RESPIRATORY DISEASE CHARACTERIZED BY
COUGH, WHEEZING AND SHORTNESS OF BREATH WHERE UPON REMOVAL FROM
ENVIRONMENT, THE SYMPTOMS SUBSIDE.

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

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