

PRAXAIR SURFACE TECHNOLOGIES INC -- AL-111 (PRODUCT CODE 031011-05) --
3439-01-425-8305

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

Product ID:AL-111 (PRODUCT CODE 031011-05)

MSDS Date:10/19/1993

FSC:3439

NIIN:01-425-8305

Status Code:A

MSDS Number: CJTFV

=== Responsible Party ===

Company Name:PRAXAIR SURFACE TECHNOLOGIES INC

Address:1555 MAIN STREET

City:INDIANAPOLIS

State:IN

ZIP:46224-3283

Country:US

Inf

o Phone Num:317-240-2650

Emergency Phone Num:317-240-2209

Preparer's Name:MICHELLE ALEXANDER

Chemtrec Ind/Phone:(800)424-9300

CAGE:0FGH2

=== Contractor Identification ===

Company Name:PRAXAIR SURFACE TECHNOLOGIES INC

Address:1555 MAIN STREET

Box:City:INDIANAPOLIS

State:IN

ZIP:46224-3283

Country:US

Phone:317-240-2650

CAGE:0FGH2

Company Name:STARGHILL TECHNOLOGIES CORP

Address:3850 OAKMAN BLVD

Box:City:DETROIT

State:MI

ZIP:48204-1119

Country:US

Phone:313-933-4141

Contract Num:SP0490-95-D-4037

CAGE

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Composition/Information on Ingredients
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Ingred Name:ALUMINUM
CAS:7429-90-5
RTECS #:BD0330000
> Wt:75.
OSHA PEL:15 MG/M3
ACGIH TLV:10 MG/M3

Ingred Name:SILICON
CAS:7440-21-3
RTECS #:VW0400000
Minumum % Wt:5.
Maxumum % Wt:20.
OSHA PEL:15 MG/M3
ACGIH TLV:10 MG/M3

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Hazards Identification
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Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute
and Chronic:ACUTE- SKIN: MAY CAUSE IRRITATION.
EYES: MAY CAUSE IRRITATION. INHALATION: MAY CAUSE INCREASE IN
BLOOD WHITE CELL COUNTS. CHRONIC- MAY CAUSE SKIN SENSITIZATION IN
SUSCEPTABLE INDIVIDUALS. MAY CAUSE DERMATITIS PAPULES.
Effects of Overexposure:EYES: MAY CAUSE REDNESS OF THE CONJUNCTIVA.
INGESTION: MAY CAUSE NAUSEA. INHALATION: MAY CAUSE FEVER AND
COUGH.
Medical Cond Aggravated by Exposure:BREATHING OF DUST MAY AGGRAVATE
ASTHMA AND INFLAMMATORY OR FIBROTIC
PULMONARY DISEASE. MAY ALSO
AGGRAVATE AN EXISTING DERMATITIS.

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First Aid Measures
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First Aid:INGESTION: NO HARMFUL EFFECTS EXPECTED. SKIN: WASH
THOROUGHLY WITH SOAP AND WATER. INHALATION: REMOVE TO FRESH AIR.
GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. OXYGEN MAY BE GIVEN
IF NECESSARY. CALL A PHYSICIAN. EYES: FLUSH THOROUGHLY WITH
WATER. NOTES TO PHYSICIAN: THERE IS NO SPECIFIC ANTIDOTE.
TREATMENT OF OVEREXPOSURE S

HOULD BE DIRECTED AT THE CONTROL OF
SYMPTOMS AND THE CLINICAL CONDIT ION.

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

Flash Point:NONE

Lower Limits:NONE

Upper Limits:NONE

Extinguishing Media:USE SPECIAL DRY POWDER METAL EXTINGUISHING MATERIAL TO EXTINGUISH METAL FIRES. USE APPROPRIATE EXTINGUISHER TO EXTINGUISH COMBUSTABLE MATERIALS THAT MAY BE IGNITED BY THERMAL FLAME.

Fire Fighting Procedures:CONSULT AND COMPLY WITH ANSI Z49.1 SAFETY IN WELDING AN

D CUTTING, NFPA51B STANDARD FOR FIRE PREVENTION IN USE OF CUTTING AND WELDING PROCESSES. NFPA51B OXYGEN-FUEL GAS SYSTEMS FOR WELDING AND CUTTING, AND NFPA58 STANDARD FOR THE STORAGE AND HANDLING OF LIQUIFIED PETROLEUM GASES.

Unusual Fire/Explosion Hazard:AIRBORNE DUST PARTICLES, ESPECIALLY METAL DUST, AND ACCUMULATION OF SUCH SHOULD BE TREATED AS EXPLOSIVES. TO MINIMIZE DANGER FROM DUST EXPLOSIONS, ADEQUATE VENTILATION SHOULD BE PROVIDED TO SPRAY BOOT H IN ACCORDANCE WIT

H AMERICAN WELDING

SOCIETY PUBLICATION AWS C2.1-73, AND ACGIH PUBLICATION "INDUSTRIAL VENTILATION".

===== Accidental Release Measures =====

Spill Release Procedures:WEAR PROTECTIVE EQUIPMENT TO PROTECT AGAINST HAZARDS AND DISPOSE OF PER WASTE DISPOSAL METHOD.

===== Handling and Storage =====

Other Precautions:CAUTION: WHEN THERMAL SPRAYING - ELECTRICITY CAN CAUSE FATAL SHOCK! DO NOT TOUCH LIVE ELECTRICAL PARTS! ARC RAYS CAN

BURN EYES AND SKIN! WEAR RECOMMENDED EYE AND BODY PROTECTION. FUMES, GAS, & DUST CA N HARM YOUR HEALTH. PROVIDE ENOUGH VENTILATION AND WEAR RESPIRATORS.

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

Respiratory Protection:DEPENDS UPON SPECIFIC USE, CONDITION, AND LOCATION. IF THERE IS DUSTINESS, WEAR RESPIRATOR SELECTED PER OSHA 1910.134, AND OSHA 29 CFR 1910.252 AND ANSI Z49.1

Ventilation:LOCAL DUST PICK UP AND VENTILATION RECOMMENDED.

Prot

ective Gloves:NOT REQUIRED.

Eye Protection:WHEN DUSTY USE GOGGLES PER OSHA 1910.13.

Other Protective Equipment:SEE ANSI Z49.1, ANSI Z87.1, ANSI Z88.2 FOR HELMETS, FACE SHIELDS AND GOGGLES.

Supplemental Safety and Health

CAUTION: WHEN THERMAL SPRAYING-ELECTRICITY CAN CAUSE FATAL SHOCK! DO NOT TOUCH LIVE ELECTRICAL PARTS! ARC RAYS CAN BURN EYES AND SKIN! WEAR RECOMMENDED EYE ANDBODY PROTECTION. FUMES, GAS, AND DUST CAN HARM YOUR HEALTH. PROVIDE ENOUGH VENTILATION AND WEAR RESP

IRATORS.(OTHER INFO)

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

HCC:N1

Boiling Pt:B.P. Text:NONE

Vapor Density:>AIR

Appearance and Odor:GRAY POWDER

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

Stability Indicator/Materials to Avoid:YES

NONE KNOWN

Stability Condition to Avoid:NONE KNOWN

Hazardous Decomposition Products:WHEN THERMAL SPRAYING, DECOMPOSITION PRODUCTS WILL VARY WITH OPERATING CONDITIONS. DECOMPOSITION PRODUCTS OF NORMAL OPERATION FROM THIS THERMAL SPRAY POWDER-OXIDES, SUB-OXIDES, ETC.

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

Waste Disposal Methods:DISPOSE OF WASTE PER LOCAL, STATE, AND FEDERAL REGULATIONS.

===== MSDS Transport Information =====

Transport Information:PROPER SHIPPING NAME: METAL ALLOY POWDER NOI ITEM 136500 SUB 1.

===== Regulatory Information =====

SARA Title III Information:NONE

State Regu

latory Information:NONE

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

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