

PRAXAIR SURFACE TECHNOLOGIES INC -- ALO-159 (PRODUCT CODE 061026-05) --
3439-01-425-8413

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

Product ID:ALO-159 (PRODUCT CODE 061026-05)
MSDS Date:01/22/1992
FSC:3439
NIIN:01-425-8413
Status Code:A
MSDS Number: CJTHW
=== Responsible Party ===
Company Name:PRAXAIR SURFACE TECHNOLOGIES INC
Address:1555 MAIN STREET
City:INDIANAPOLIS
State:IN
ZIP:46224-3283
Country:US

Info Phone Num:317-240-2650
Emergency Phone Num:317-240-2209
Preparer's Name:DELMAR BEIGHT
Chemtec 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:0V

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Composition/Information on Ingredients
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Ingred Name:ALUMINUM OXIDE
CAS:1344-28-1
RTECS #:BD1200000
> Wt:75.
OSHA PEL:15 MG/M3
ACGIH TLV:10 MG/M3

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Hazards Identification
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Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:SKIN CONTACT: MAY CAUSE IRRITATION.
EYE CONTACT: MAY CAUSE IRRITATION. SKIN ABSORPTION MAY SHOW

EVIDENCE OF IRRITATION. INHALATION: MAY CAUSE INCREASE IN BLOOD
WHITE CELL COUNTS. EFFECTS OF PEPEATED O VEREXPOSURE: MAY CAUSE
SKIN SENSITIZATION IN SUSCEPTABLE INDIVIDUALS. MAY CAUSE SKIN
SENSITIZATION IN SUSCEPTABLE INDIVIDUALS. MAY CAUSE DERMATITIS
PAPULES.

Explanation of Carcinogenicity:NONE CURRENTLY KNOWN
Effects of Overexposure:EYE CONTACT: MAY EXPERIENCE REDNESS OF THE
CONJUNCTIVA. SWALLOWING: MAY CAUSE NAUSEA. INHALATION: MAY CAUSE
FEVER AND/OR COUGH.

Medical C
ond 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:SKIN: WASH THOROUGHLY WITH SOAP AND WATER. INHALATION:
REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING.
OXYGEN MAY BE GIVEN. CALL A PHYSICIAN. EYES:FLUSH THOROUGHLY WITH
WATER. SWA LLOWING: NO HARMFUL EFFECTS EXPECTED. NOT
E TO PHYSICIAN:
THERE IS NO SPECIFIC ANTIDOTE. TREATMENT OF OVEREXPOSURE SHOULD BE
DIRECTED AT THE CONTROL OF SYMPTOMS AND THE CLINICAL CONDITION.

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Fire Fighting Measures
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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 Fi

ighting Procedures:CONSULT AND COMPLY WITH ANSI Z49.1 SAFETY IN WELDING AND 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 WITH AMERICAN WELDING SOCIETY PUBLICATION AWS2.1-73, 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 CAN 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.

Protective 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 AND BODY PROTECTION. FUMES, GAS, AND

DUST CAN

HARM YOUR HEALTH. PROVIDE ENOUGH VENTILATION AND WEAR RESPIRATORS.(OTHER INFO)

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

HCC:N1

Boiling Pt:B.P. Text:NONE

Vapor Density:N/VOLATILE

Appearance and Odor:FINE BUFF COLR 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 ON

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

Federal Regulatory Information:NONE

State Regulatory Information:NONE

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

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