PRAXAIR SURFACE TECHNOLOGIES INC -- NI-430 PRODUCT CODE: 036141-15 -- 3439-01-426-5257

Product ID:NI-430 PRODUCT CODE: 036141-15 MSDS Date:08/20/1993 FSC:3439 NIIN:01-426-5257 Status Code:A MSDS Number: CJWRN === Responsible Party === Company Name: PRAXAIR SURFACE TECHNOLOGIES INC Address:1555 MAIN STREET **City:INDIANAPOLIS** State:IN ZIP:46224-3283 Country:US Info P hone Num:317-240-2650 Emergency Phone Num: (800) 424-9300 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:SP0450-95-D-4037 CAGE:0

VYG8

Ingred Name:CHROMIUM CAS:7440-47-3 RTECS #:GB4200000 Minumum % Wt:5. Maxumum % Wt:20. OSHA PEL:1 MG/M3 ACGIH TLV:0.5 MG/M3 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name:NICKEL CAS:7440-02-0 RTECS #:QR5950000 Minumum % Wt:50. Maxumum % Wt:75. OSHA PEL:1 MG/M3 ACGIH TLV:1 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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER. Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES Health Hazards Acute and Chronic:SKIN:MAY CAUSE ALLERGIC DERMATITIS, WITH REDNESS & PAPULAR FORMATION IN SUSCEPTABLE INDIVIDUALS. MAY CAUSE ULCERS PROGRESSING TO DRY & SCALY SKIN, FEVER. EYE:MAY CAUSE IRRIATATION, EXPERIENCED AS REDN ESS & EXCESS REDNESS OF THE CONJUCTIV A. SWALLOWING: MAY CAUSE NAUSEA, ABDOMINAL PAIN, VOMITING, DIARRHEA, CENTRAL NERVOUS SYSTEM DEPRESSION, & BURNING SENSATION. INHALATION:MAY CAUSE RESPIRATORY TRACT IRRITATION, WITH CHEST PAIN, VOIMITING, DIARRHEA, BURNING SENSATION, & CENTRAL NERVOUS SYSTEM DEPRESSION. MAY ALSO CAUSE INTERSTITIAL PNEUMONITIS & SENSITIZATION OF THE RESPIRATORY TRACT IN SUSCEPTIB LE PERSONS.

Explanation of Carcinogenicity:NICKEL AND CHROMIUM HAVE BEEN DETERMINED TO CAUSE CANCER IN EXPERMEN

TAL ANIMALS(IARC, NTP). NICKEL IS LISTED AS A PROBABLE HUMAN CARCINOGEN. CHROMIUM IS LISTED AS A HUMAN CARCINOGEN. CHRONIC ECZEMA/NE URODERMATITIS FROM NICKEL DOES NOT REQUIRE CONTINUOUS METAL CONTACT.

Effects of Overexposure:MAY CAUSE SENSITIZATION IN SUSCEPTABLE INDIVIDUALS. CHRONIC EXPOSURE TO THE EYE CAN CAUSE CORNEAL DAMAGE, POLYCYTHEMIA, HYPERPLASIA OF THE THYROID GLAND AND DAMAGE TO THE ALPHA CELLS OF THE PANCREAS. REPEATED INHALATION MAY CAUSE EMPHYSEMA OR PU

LMONARY FIBROTIC DISEASE. CHRONIC SKIN CONTACT MAY SPREAD TO THE WHOLE BODY WITH LESIONS, ITCHING, SORENESS, BURNING SENSATION AND REDNESS.

Medical Cond Aggravated by Exposure:BREATHING OF DUST MAY AGGRAVATE ASTHMA AND INFLAMMATORY OR FIBROTIC PULMONARY DISEASE. MAY ALSO AGGRAVATE AN EXISTING DERMATITIS.

First Aid:SWALLOWING:GIVE AT LEAST 2 GLASSES OF MILK OR WATER. INDUCE VOMITING, UNLESS PATIENT IS UNCON

SCIOUS. CALL A PHYSICIAN.

SKIN:WASH THOROUGHLY WITH SOAP & WATER. INHALATIO: REMOVE TO FRESH AIR. GIVE ARTI FICIAL RESPIRATION IF NOT BREATHING. OXYGEN MAY BE GIVEN IF NECESSARY. CALL A PHYSICIAN. EYES: FLUSH THOROUGHLY WITH PLENTY OF WATER. IF DISCOMFORT PERSISTS, SEEK MEDICAL ATTENTION.PREFERABLYAN OPTHAL MOLOGIST. NOTES TO PHYSCIAN:THE HAZARDS OF THIS MATERIAL ARE MAINLY DUE TO ITS SENSITIZING AND MILD IRRITATING PROPERTIES. THERE IS NO SPECIFIC ANTIDOTE.

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Flash Point:NONE

Upper Limits:0.00%

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

Fire Fighting Procedures:NONE SPECIFIED BY MANUFACTURER. Unusual Fire/Explosion Hazard:NONE SPECIFIED BY MANUFACTURER.

Spill Release Procedures:WEAR PROTECTIVE EQUIPMENT TO PROTECT AGAINST HAZARDS AND DISPOSE OF PER WASTE DISPOSAL METHOD. Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER. 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 B ODY PROTECTION.

FUMES, GAS, AND DUST CAN HARM YOUR HEALTH.PROVIDE ENOUGH VENTILATION AND WEAR RESPIRATOR IF REQUIRED.

Respiratory Protection:DEPENDS UPON SPECIFIC USE, CONDITION, AND LOCATION. IF THERE IS DUSTINESS, WEAR RESPRI-RATOR 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:WHE
N 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.
Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.
Supplemental Safety and Health NONE SPECIFIED BY MANUFACTURER.

HCC:N1

Boiling Pt:B.P. Text:NONE Vapor Density:N/VOLATILE Evaporation Rate & amp; Reference:UNAVAILABLE Appearance and Odor:DUSTY DARK GRAY POWDER Percent Volatiles by Volume:0

Stability Indicator/Materials to Avoid:YES NONE KNOWN. Stability Condition to Avoid:NONE KNOWN. Hazardous Decomposition Products:WHEN THERMAL SPRAYING, WILL VARY WITH OPERATING CONDITIONS. REASONABLY EXPECTED DECOMPOSITION PRODUCTS OF NORMAL OPERATION FROM THIS THERMAL SPRAY POWDER INCLUDE OXIDES OF THE LISTED INGREDIENTS.

Toxicologica

I Information: NONE SPECIFIED BY MANUFACTURER.

Ecological:NONE SPECIFIED BY MANUFACTURER.

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

Transport Information:NONE SPECIFIED BY MANUFACTURER.

SARA Title III Information: PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT OF 1986 AND OF 40 CFR 372: CHROMIUM, CAS# 7440-47-3,