

SULZER PLASMA TECHNIK INC -- AMDRY 780 -- 3439-01-249-7197

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Product Identification
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Product ID:AMDRY 780
MSDS Date:05/10/1992
FSC:3439
NIIN:01-249-7197
Status Code:A
MSDS Number: CLPGJ
=== Responsible Party ===
Company Name:SULZER PLASMA TECHNIK INC
Address:1972 MEIJER DR
Box:84310
City:TROY
State:MI
ZIP:48084-0310
Country:US
Info Phone Num:313-288-1200
Emergency Phone Num:800-424-9300
Chemtrec Ind/Phone:(800)424-9300
CAGE:53654

=== Contractor Identification ===
Company Name:SULZER PLASMA TECHNIK INC
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Composition/Information on Ingredients
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Ingred Name:NICKEL
CAS:7440-02-0
RTECS #:QR5950000
Minumum % Wt:92.25
Maxumum % Wt:92.9
OSHA PEL:1 MG/M3
ACGIH TLV:0.05 MG/M3
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

Ingred Name:SILICON
CAS:7440-21-3
RTE

CS #:VW0400000
Minumum % Wt:4.35
Maxumum % Wt:4.65
OSHA PEL:10 MG/M3
ACGIH TLV:10 MG/M3

Ingred Name:BORON
CAS:7440-42-8
RTECS #:ED7350000
Minumum % Wt:2.75
Maxumum % Wt:3.1

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES
Health Hazards Acute and Chronic:NICKEL TARGET ORGANS: LUNGS, PARANASAL
SINUS, CENTRAL NERVOUS SYSTEM. HYPERPNEA, CYANOSIS, WEAKNESS,

LEUKOCYTOSIS, PNEUMONITIS, DELIRIUM, CONVULSIONS, LUNG CANCER AND
SINUS AND PULMONARY CARCINOGENESIS IS DUE TO CHRONIC EXPOSURE.
SILICON AND BORON: NO HEALTH EFFECTS GIVEN.

Explanation of Carcinogenicity:NICKEL:IARC: CARCINOGENIC TO HUMANS WITH
SUFFICIENT EPIDEMIOLOGICAL EVIDENCE. NTP: CARCINOGEN; REASONABLE
ANTICIPATED TO BE CARCINOGENIC, LIMITED EVIDENCE IN HUMANS OR
SUFFICIENT EVIDENCE IN EXPERIMENTAL ANIMALS. ACGIH AND OSHA: NOT
LISTED. NIOSH: CARCINOGEN AS DEFINED BY

NIOSH. NO FURTHER
CLASSIFICATION. MAK: CAPABLE OF PRODUCING MALIGNANT TUMORS IN
HUMANS.

Effects of Overexposure:HEADACHE, VERTIGO, NAUSEA, VOMITING, EPIGASTRIC
PAIN, SUBSTERNAL PAIN, COUGH, HYPERPNEA, CYANOSIS, WEAKNESS,
LEUKOCYTOSIS, PNEUMONITIS, DELIRIUM, CONVULSIONS. LUNG CANCER AND
SINUS AND PULMONARY CARCINOGENESIS DUE TO CHRONIC EXPOSURE. SOURCE
NIOSH 1990.

===== First Aid Measures =====

First Aid:EYES: IRRIGATE WITH WATER
OCCASIONALLY LIFTING LOWER AND
UPPER EYELIDS. GET MEDICAL ATTENTION. CONTACT LENSES SHOULD NOT BE
WORN WHEN WORKING WITH THIS POWDER. SKIN: FLUSH WITH SOAP AND
WATER. REMOVE CONTAMINATED CLOTHING. IF IRRITATION PERSISTS, GET
MEDICAL ATTENTION. INHALATION: IF LARGE AMOUNT OF PRODUCT INHALED,
MOVE TO FRESH AIR. IF BREATHING HAS STOPPED PERFORM CPR. KEEP
AFFECTED PERSON WARM AND AT REST. GET MEDICAL ATTENTION.
INGESTION: IF PRODUCT SWALLOWED, GET MEDICAL ATTENTION.

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Fire Fighting Measures
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Extinguishing Media: DRY CHEMICAL, SAND, OR FLOOD WITH WATER FROM A DISTANCE.

Fire Fighting Procedures: FLOOD WITH WATER FROM A DISTANCE.

Unusual Fire/Explosion Hazard: FINELY DIVIDED DUST MAY IGNITE WHEN IN CONTACT WITH A FLAME. HAZARDOUS COMBUSTION PRODUCTS: POSSIBLE UNBURNED VAPORS. EXPLOSION SENSITIVITY TO IMPACT AND/ OR STATIC: N/A.

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Accidental Release Measures
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Spill Re

lease Procedures: WEAR RESPIRATORY EQUIPMENT, PROTECTIVE CLOTHING, GLOVES, SAFETY GLASSES DURING SPILL CLEANUP. COLLECT MATERIAL BY WET SWEEPING, DRY SWEEPING WITH SWEEPING COMPOUND, OR VACUUM WITH EXPLOSION PROOF APPARATUS EQUIPPED WITH HIGH EFFICIENCY PARTICULATE AIR (HEPA) FILTER. SALVAGE MATERIAL FOR ON-SITE REUSE, RECYCLING, OR CONTACT LOCAL AUTHORITY FOR GUIDANCE ON WASTE STORAGE AND DISPOSAL METHODS.

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Handling and Storage
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Handling and Storage Precautions: KEEP PRODUCT DRY AND IN CLOSED CONTAINERS. DO NOT STORE NEAR MINERAL ACIDS.

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Exposure Controls/Personal Protection
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Respiratory Protection: USE NIOSH APPROVED PARTICULATE RESPIRATORS WHENEVER DUST MAY BE DETECTED IN THE AIR.

Ventilation: USE ADEQUATE LOCAL EXHAUST SYSTEM FOR OPERATIONS LIKELY TO PRODUCE DUST/MIST/FUME IN ORDER TO MAINTAIN AIRBORN CONCENTRATIONS BELOW SPECIFIED LIMITS.

Protective Gloves: WEAR IMPERVIOUS GLOVES DURING ROUTINE HANDLING.

Eye Protection: WEAR SAFETY GLASSES DURING HANDLING.

Other Protective Equipment: WEAR SAFETY FOOTWEAR AND PROTECTIVE CLOTHING. CHANGE CLOTHING DAILY IF CONTAMINATED WITH PRODUCT OR BY-PRODUCT. SAFETY SHOWER AND EYE WASH STATION SHOULD BE PRESENT IN WORK AREA.

Work Hygienic Practices: WASH HANDS THOROUGHLY AND OFTEN AFTER HANDLING POWDER OR BY-PRODUCTS. KEEP WORK AREA CLEAN. DO NOT EAT OR DRINK IN WORK AREA. LAUNDRY PROTECTIVE CLOTHING AND G

LOVES AS REQUIRED.

Supplemental Safety and Health

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

HCC:T7

Solubility in Water:NONE

Appearance and Odor:SOLID, GRAY POWDER; NO ODOR

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

Stability Indicator/Materials to Avoid:YES

STRONG ACIDS AND ALKALIES.

Hazardous Decomposition Products:N/A. OZONE AND NITRIC OXIDE ARE FORMED BY HIGH TEMPERATURE PLASMA OR COMBUSTION JET AND CONTACT WITH STRONG ACIDS CAN

LIBERATE HYDROGEN GAS. HAZARDOUS COMBUSTION PRODUCTS: POSSIBLE UNBURNED VAPORS.

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

Toxicological Information:HAZARDS: NICKEL: ORAL, RAT, LD50: >5000 MG/KG; INHALATION, RAT. LC50: >10MG/L. SILICON: ORAL, RAT, LD50: 3160 MG/KG. BORON: ORAL, MOUSE, LD50: 2000 MG/KG.

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

Waste Disposal Methods:SALVAGE MATERIAL FOR ON-SITE REUSE OR RECYCLING, OR CONTACT THE APPROPRIATE LOCAL GOVERNMENT AUTHORITY FOR GUIDANCE ON ACCEPTABLE WASTE STORAGE AND DISPOSAL METHODS.

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

Transport Information:LESS THAN RQ, 100 LBS (45.4 KG): CAN BE SHIPPED AS A NONHAZARDOUS (NONREGULATED) MATERIAL IN QUANTITIES LESS THAN 100 POUNDS (RQ OF NICKEL METAL LIMITED TO THOSE PIECES OF THE METAL HAVING A DIAMETER SMALLER THAN 100 MICROMETERS OR 0.004 INCHES). GREATER THAN 100 LBS, THE PRODUCT MUST BE SHIPPED AND HANDLED AS FOLLOWS: PSN: HAZARDOUS SUBSTANCE, SOLID, N.O.S.; HAZARD CLASS: ORM-E; NA 9188; LABELS REQUIRED: NONE; PACKAGE EXCEPTIONS: NONE. PACKAGING REQUIREMENTS: 49 CFR PART 173.1300 (GENERAL SAFE SHIPPING AND TRANSFERRING PROTOCOL). MAXIMUM NET QUANT. / PACKAGE: NO LIMIT. WATER SHIPMENT REQUIREMENTS: (CONTD. SEE "OTHER INFO")

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

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ing agencies):

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