

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

Product ID:SULFURIC ACID

MSDS Date:06/01/1997

FSC:6810

NIIN:00-975-0707

MSDS Number: CGXCN

=== Responsible Party ===

Company Name:PCS NITROGEN INC

Address:3175 LENOX PARK BLVD, SUITE 400

City:MEMPHIS

State:TN

ZIP:38115-4256

Country:US

Info Phone Num:800-542-0132

Emergency Phone Num:800-542-0132

Preparer's Name:RANDY FERRATA

CAGE:MO421

=== Contractor Identification ===

Comp

any Name:MAGNOLIA CHEMICALS AND SOLVENTS

Address:1020 SAMS AVENUE

Box:10276

City:NEW ORLEANS

State:LA

ZIP:70181-0278

Country:US

Phone:504-733-6600

CAGE:0LNB7

Company Name:PCS NITROGEN INC

Address:3175 LENOX PARK BLVD, SUITE 400

Box:City:MEMPHIS

State:TN

ZIP:38115-4256

Country:US

Phone:800-542-0132

CAGE:MO421

===== Composition/Information on Ingredients =====

Ingred Name:SULFURIC ACID (SARA 302/313) (CERCLA)

CAS:7664-93-9

RTECS #:WS5600000

Fraction by Wt: 93-99.5%

Other REC Li

mits:NONE RECOMMENDED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3/3 STEL; 9596
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

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

LD50 LC50 Mixture:ORAL LD50 (RAT): 2140 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:INHALATION MAY CAUSE LUNG IRRITATION &
PULMONARY EDEMA. INGESTION MAY BE FATAL. SKIN CONTACT MAY CAUSE
SEVERE IRRITATION
. EYE CONTACT WITH LIQUID MAY CAUSE IRRITATION.
CHRONIC EXPOSURE MAY CAUSE EROSION OF TEETH, LESIONS OF SKIN,
TRACHEO-BRONCHITIS, MOUTH INFLAMMATION, CONJUNCTIVITIS, ETC.
Explanation of Carcinogenicity:IARC CLASSIFIED "STRONG INORGANIC MISTS
CONTAINER SULFURIC ACID" AS A CATEGORY 1 CARCINOGEN, CARCINOGENIC
TO HUMANS.
Effects of Overexposure:CORROSIVE BURNS TO UPPER RESPIRATORY SYSTEM,
CORROSIVE BURNS TO MOUTH/THROAT/STOMACH, SEVERE SKIN BURNS, CORNEAL
BURNS, CONJUNCTIVITIS, BLINDNESS, SEVERE OR PERMANENT INJURY MAY
RESULT.
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:EYES: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES WHILE
HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE
CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF IRRITATION
PERSIST, GET MEDICAL ATTENTION. INHALATION: REMOVE TO FRESH AIR.
RESTORE BREATHING. GET MEDICAL ATTENTION. INGESTION: DRINK LARGE
AMOUNTS OF WATER. DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

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

Flash Point:NONFLAMMABLE
Lower Limits:NOT GIVEN
Upper Limits:NOT GIVEN
Extinguishing Media:USE WATER SPRAY OR OTHER SUITABLE AGENT FOR FIRES
ADJACENT TO NON-LEAKING CONTAINERS OF SULFURIC ACID.
Fire Fighting Procedures:DO NOT USE SOLID WATER STREAMS NEAR RUPTURED
TANKS OR SPILLS OF SULFURIC ACID. ACID REACTS VIOLENTLY W

ITH WATER

& CAN SPLATTER ACID ONTO PERSONNEL.

Unusual Fire/Explosion Hazard:FLAMMABLE & POTENTIALLY EXPLOSIVE

HYDROGEN GAS CAN BE GENERATED INSIDE METAL DRUMS & STORAGE TANKS.

CONCENTRATED ACID CAN IGNITE COMBUSTIBLE MATERIAL ON CONTACT

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

Spill Release Procedures:DILUTE SMALL SPILLS OR LEAKS CAUTIOUSLY WITH PLENTY OF WATER. NEUTRALIZE WITH ALKALI SUCH AS SODA ASH OR LIME.

ADEQUATE VENTILATION IS REQUIRED FOR

SODA ASH DUE TO RELEASE CARBON

DIOXIDE GAS. NO SMOKING IN SPILL AREA.

Neutralizing Agent:SODA ASH OR LIME

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

Handling and Storage Precautions:STORE IN COOL, WELL VENTILATED AREA AWAY FROM COMBUSTIBLES AND REACTIVE CHEMICALS, VENT METAL CONTAINERS WEEKLY OR MORE FREQUENTLY IN HOT WEATHER.

Other Precautions:DIKING OF STORAGE TANKS IS RECOMMENDED. VAPORS MAY CONTAIN EXPLOSIVE HYDROGEN. TO PREVENT IGNITION OF VAPOR, SMOKING,

FLAMES AND SPARKS SHOULD NOT BE PERMITTED IN STORAGE AREAS. CAUSES SEVERE BURNS. LABEL SIGN WORD: DANGER!

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

Respiratory Protection:WHERE REQUIRED, USE A RESPIRATOR APPROVED BY NIOSH FOR SULFURIC ACID OR MISTS AS APPLICABLE. SOME EXPOSURES MAY REQUIRE A SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OR SUPPLIED AIR RESPIRATOR WITH A FULL FACEPIECE OR HELMET.

Ventilation:EXHAUST VENTILATION S

UFFICIENT TO KEEP AIRBORNE

CONCENTRATIONS BELOW RESPECTIVE TLV'S.

Protective Gloves:GAUNTLET GLOVES

Eye Protection:CHEMICAL SAFETY GOGGLES/FULL FACE SHIELD

Other Protective Equipment:CHEMICAL RESISTANT CLOTHING AS NECESSARY TO PREVENT SKIN CONTACT. AN EMERGENCY EYEWASH AND SHOWER SHOULD BE AVAILABLE.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

Supplemental Safety and Health

AT A MINIMUM WEAR ACID R

RESISTANT APRON, PROTECTIVE CLOTHING, BOOTS FOR
ROUTINE USES. FOR INCREASED PROTECTION, WEAR ACID-RESISTANT
TROUSERS AND JACKET. WEAR HARD HAT. DO NOT WEAR CONTACT LENSES. USE
A IR VENTILATED ACID HOOD.

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

HCC:C1

Boiling Pt:B.P. Text:193F,89C

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Decomp Temp:Decomp Text:NOT GIVEN

Vapor Pres:NEGLIGIBLE

Vapor Density:NOT GIVEN

Spec Gravity:1.706

pH:0.9

Evaporation Rate & Reference:N

OT GIVEN

Solubility in Water:COMPLETE

Appearance and Odor:OILY, COLORLESS TO SLIGHTLY YELLOW TO TURBID
LIQUID, NO ODOR

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

Stability Indicator/Materials to Avoid:YES

NITRO COMPOUNDS, CARBIDES, DIENES, ALCOHOLS (WHEN HEATED), OXIDIZING
AGENTS, SUCH AS CHLORATES/PERMANGANATE

Stability Condition to Avoid:TEMPERATURES OF 300C OR HIGHER YIELD

SULFURIC TRIOXIDE GAS, WHICH IS TOXIC, CORROSIVE AND AN OXIDIZER.

Hazardous Decomp

osition Products:SULFUR TRIOXIDE GAS. ALSO THIS IS A
FIRE RISK IF IN CONTACT WITH ORGANIC MATERIALS.

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING
ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR
LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

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