

FEDERAL CONTRACT SERVICES, DIV OF FREELANDER CONSU -- SULFURIC ACID --  
6810-00-249-9354

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

Product ID:SULFURIC ACID

MSDS Date:10/05/1995

FSC:6810

NIIN:00-249-9354

MSDS Number: CBRXV

=== Responsible Party ===

Company Name:FEDERAL CONTRACT SERVICES, DIV OF FREELANDER CONSU

Address:9716 OLD KATY RD. #114

City:HOUSTON

State:TX

ZIP:77055-6209

Country:US

Info Phone Num:7

13-668-9000

Emergency Phone Num:800-424-9300

CAGE:01BX5

=== Contractor Identification ===

Company Name:FEDERAL CONTRACT SERVICES, DIV OF FREELANDER CONSU

Address:9716 OLD KATY RD. #114

Box:City:HOUSTON

State:TX

ZIP:77055-6209

Country:US

Phone:713-668-9000

CAGE:01BX5

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

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

CAS:7664-93-9

RTECS #:WS5600000

Fraction by Wt: 37.0%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH T

LV:1 MG/M3/3 STEL; 9495

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

===== 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:EYES: CAN CAUSE IRRITATION, CORNEAL BURNS AND BLINDNESS. SKIN: CAUSES SEVERE BURNS OR IRRITATION. INHALATION: CAN CAUSE IRRITATION OR CORROSIVE BURNS TO UPPER RESP

IRATORY SYSTEM. INGESTION: CAN CAUSE IRRITATION AND CORROSIVE BURNS TO THROAT, MOUTH AND STOMACH.

Explanation of Carcinogenicity:IRAC CLASSIFIES STRONG INORGANIC ACID MISTS CONTAINING SULFURIC ACID AS CARCINOGENIC. NOT APPLICIBLE TO SULFURIC ACID.

Effects of Overexposure:EROSION OF TEETH FOLLOWED BY JAW NECROSIS, BRONCHIAL IRRITATION, COUGHING AND BRONCHIAL PNEUMONIA, OR GASTROINTESTINAL DISTURBANCES.

Medical Cond Aggravated by Exposure:ACUTE AND CHRONIC RESPIRATORY DISEASES.

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

First Aid:SKIN-EYE CONTACT: CALL PHYSICIAN IMMEDIATELY. FOR EYES, IMMEDIATELY FLUSH WITH RUNNING WATER AT LEAST 15 MINUTES. FOR SKIN, FLUSH SKIN WITH RUNNING WATER FOR AT LEAST 15 MINUTES. INHALATION: CALL PHY SICIAN IMMEDIATELY. REMOVE VICTIM FROM CONTAMINATED ATMOSPHERE. INGESTION: CALL PHYSICIAN IMMEDIATELY. DO NOT INDUCE VOMITING. IMMEDIATELY DILUTE SWALLOWED MATERIAL BY ORALLY ADMINISTERING WATER.

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

Flash Point:NONFLAMMABLE

Extinguishing Media:AVOID SPRAYING WATER INTO CONTAINERS; USE WATER SPRAY. FOR SMALL AMOUNTS OF COMBUSTIBLES, SMOTHER FIRE WITH DRY CHEMICAL

Fire Fighting Procedures:AVOID DIRECT STREAMS OF WATER, MAY CAUSE SPLATTERING. USE NIOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE CLOTHING. CONSIDERABLE HEAT MAY BE EVOLVED USING WATER.

Unusual Fire/Explosion Hazard:FLAMMABLE AND EXPLOSIVE H

HYDROGEN GAS CAN

BE GENERATED INSIDE METAL DRUMS AND STORAGE TANKS. CONCENTRATED ACID CAN IGNITE COMBUSTIBLE MATERIAL ON CONTACT.

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

Spill Release Procedures:NO SMOKING IN SPILL AREAS. DILUTE MATERIAL CAUTIOUSLY WITH LARGE QUANTITIES OF WATER, THEN NEUTRALIZE WITH ALKALI SUCH AS SODA ASH OR LIME. KEEP OUT OF SEWER SYSTEM. DIKING WITH SODA ASH IS RECOMMENDED. ADEQUATE VENTILATION IS REQUIRED USING SODA ASH

Neutralizing Agent:LIME OR SODA ASH

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

Handling and Storage Precautions:NO SMOKING IN STORAGE AREAS. STORE IN COOL, WELL VENTILATED AREAS AWAY FROM COMBUSTIBLES AND REACTIVE CHEMICALS. KEEP AWAY FROM SUN AND HEAT.

Other Precautions:KEEP CONTAINERS UPRIGHT. WHEN DILUTING, ALWAYS ADD ACID TO WATER CAUTIOUSLY WITH AGITATION.

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

Respiratory Protection:USE NEGATIVE PRESSURE AIR PURIFYING RESPIRATOR WITH NIOSH/MSHA APPROVED DUST/MIST FILTER CARTRIDGES WHEN EXPOSURE TO MISTS EXCEED PERMISSIBLE EXPOSURE LIMITS: TWA > 0.05 MG/M<sup>3</sup>

Ventilation:REQUIRED. LOCAL EXHAUST. NOTE: VENTILATE STORAGE TANKS BEFORE ENTERING.

Protective Gloves:RUBBER GLOVES

Eye Protection:CHEMICAL GOGGLES OR FULL FACE SHIELD.

Other Protective Equipment:RUBBER SAFETY SHOES/BOOTS. RUBBER APRON OR FULL SUIT IF SPLASHES LIKELY.

Work Hygienic Practices:PROHIBIT SMOKING. PROVIDE SAFETY SHOWERS/EYE

WASHES NEAR WORK SITE. TRAIN EMPLOYEES IN CHEMICAL HANDLING PRACTICES.

Supplemental Safety and Health

HYDROGEN GAS MAY ACCUMULATE IN CONTAINERS. AVOID IGNITION SOURCES. SPILL OVER INTO SEWERS MAY GENERATE HYDROGEN GAS OR TOXIC SULFIDES. ADDITION OF WATER TO ACID CAUSES HEAT AND POSSIBLE SPLATTERING.

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

HCC:C1

Boiling Pt:B.P. Text:235F,113C

Melt/Freeze Pt:M.P/F.P Text:-54F,-48C

Vapor Pres:0

.005  
Spec Gravity:1.276-1.285  
pH:0.9  
Solubility in Water:COMPLETE  
Appearance and Odor:OILY, COLORLESS TO SLIGHTLY COLORED, CLEAR TO  
TURBID LIQUID

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

Stability Indicator/Materials to Avoid:YES  
NONE SPECIFIED BY MANUFACTURER.  
Stability Condition to Avoid:CAPABLE OF IGNITING FINELY DIVIDED  
COMBUSTIBLE MATERIALS. CONTACT WITH MANY MATERIALS MAY RELEASE  
HYDROGEN GAS.  
Hazardous Decomposition Products:SULFUR TRIOXIDE MISTS,  
HYDROGEN GAS

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

Waste Disposal Methods:DISPOSAL MUST COMPLY WITH ALL FEDERAL, STATE AND  
LOCAL REGULATIONS MEETING THE REQUIREMENTS OF 40CFR264 OR 265. EPA  
HAZARDOUS WASTE NUMBER D002 (CORROSIVE). UNUSED MATERIAL SHOULD BE  
TESTED TO DETERMINE CLASSIFICATION FOR DISPOSAL PURPOSES.

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