

GREAT WESTERN CHEMICAL COMPANY -- SULFURIC ACID,66 BAUME (93% ALL GRADES)

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MSDS Safety Information
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FSC: 6810
NIIN: 00-975-0707
MSDS Date: 05/27/1999
MSDS Num: CJYZQ
Product ID: SULFURIC ACID,66 BAUME (93% ALL GRADES)
MFN: 02
Responsible Party
Cage: 0W4M8
Name: GREAT WESTERN CHEMICAL COMPANY
Address: 808 S.W. 15TH AVE
City: PORTLAND OR 97205
Info Phone Number: 503-228-2600
Emergency Phone Number: 800-497-7455
Resp. Party Other MSDS No.: 84960

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Item Description Information
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Item Manager: S9G
Item Name: SULFURIC ACID,TECHNICAL
Specification Number: A-A55828
Type/Grade/Class: TY I, CL 2
Unit of Issue: DR
Quantitative Expression: 00000000013GL
UI Container Qty: 13 GALLON
Type of Container: DRUM

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Ingredients
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Cas: 7664-93-9
RTECS #: WS5600000
Name: SULFURIC ACID
% Wt: 93 MINIMUM
OSHA PEL: 1 MG/M3
ACGIH TLV: 1 MG/M3
ACGIH STEL: 3 MG/M3
EPA Rpt Qty: 1000 LBS
DOT Rpt Qty: 1000 LBS

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Health Hazards Data
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LD50 LC50 Mixture: ORAL RAT LD50=2.140 MG/KG
Carcinogenicity Inds - NTP: NO
IARC: NO
OSHA: NO

Effects of Exposure: INHALATION: EXPOSURE TO VAPOR/MISTS CAN CAUSE SEVERE IRRITATION AND BURNS TO RESPIRATORY TRACT ANDPERMANENT LUNG DAMAGE. EYES: EXPOSURE TO VAPOR/MISTS/LIQUID CAN CAUSE SEVERE EYE IRRITATION OR BURNS,CORNEAL DAMAGE, VISION IMPAIRMENT. SKIN: EXPOSURE CAN CAUSE SEVERE SKIN IRRITATION OR BURNS,DESTRUCTION OF THE DERMIS WITH IMPAIRMENT OF SKIN TO REGENERATE. INGESTION: SEVERE IRRITATION OR BURNS TO THE GASTROINTESTINAL TRACT. CHRONIC: REPEATED INHALATION CAN CAUSE BRONCHITIS, IM PAIRMENT OF LUNG FUNCTION, AND PERMANENT LUNG DAMAGE. REPEATED INHALATION/INGESTION CAN CAUSE EROSION OF TOOTH ENAMEL.

Explanation Of Carcinogenicity: IARC GROUP 1. ACGIH APPENDIX A: LISTED, A2 SUSPECTED HUMAN: YES (STRONG ACID MIST). THIS APPLYS TO INORGANIC ACID MISTS ONLY AND DOES NOT APPLY TO SULFURIC ACID OF SULFURIC ACID SOLUTIONS.

Signs And Symptions Of Overexposure: INHALATION: SHORTNESS OF BREATH, WHEEZING, CHOKING, COUGHING, CHEST PAIN, IMPAIRMENT OF LUNG FUNCTION. EYES: TEARING, REDNESS, SWELLING, MUCOUS DISCHARGE, PAIN, CORNEAL DAMAGE, VISUAL IMPAIRMENT. SKIN: REDNESS, SWELLING, BURNING SENSATION. INGESTION NAUSEA, VOMITING, DIARRHEA, ABDOMINAL PAIN, BLEEDING AND TISSUE ULCERATION.

Medical Cond Aggravated By Exposure: SKIN, RESPIRATORY, CARDIOVASCULAR DISORDERS.

First Aid: INHALATION: MOVE TO FRESH AIR. IF NOT BREATHING, DO NOT USE MOUTH-TO-MOUTH CPR, USE HOLGER-NIELSEN METHOD (BACK PRESSURE, ARM LIFT) OR PROPER RESPIRATORY DEVICE. IF BREATHING DIFFICULT, GIVE OXYGEN. CALL PHYSICIAN. EYES: IMMEDIATELY FLUSH WITH PLENTY OF CLEAN WATER FOR 15 MINUTES, LIFT UPPER AND LOWER LIDS OCCASIONALLY. REMOVE CONTACTS. GET MEDICAL ATTENTION. SKIN: FLUSH WITH RUNNING WATER FOR 15 MINUTES AND REMOVE CONTAMINATED CLOTHING AND SHOES. IF IRRITATION/BURN CALL PHYSICIAN. INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION. IF CONSCIOUS, GIVE PLENTY OF WATER TO DRINK.

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Handling and Disposal
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Spill Release Procedures: LAND: DIKE AND PICKUP LIQUID USING PUMPS/VACUUM TRUCK, OR ABSORB LIQUID IN SAND OR COMMERCIAL ABSORBENT. PLACE IN APPROVED CONTAINERS FOR RECOVERY, DISPOSAL, OR SATELLITE ACCUMULATION. NEUTRALIZE RESIDUE WITH SODA ASH, LIME, OR OTHER AGENT. FLUSH AREA WITH WATER. COLLECT RINSATES FOR DISPOSAL OR SEWER, AS APPROPRIATE. WATER SPILLS: AS APPROPRIATE, NOTIFY DOWNSTREAM USERS OF POSSIBLE CONTAMINATION.

Neutralizing Agent: SODA ASH, LIME, OR OTHER AGENT APPROPRIATE FOR NEUTRALIZING ACIDIC LIQUIDS.

Waste Disposal Methods: IF THIS PRODUCT IS DISPOSED OF AS SHIPPED, IT MEETS CRITERIA OF HAZARDOUS WASTE DUE TO ITS CORROSIVITY. AS A WASTE IT IS SUBJECT TO LAND DISPOSAL RESTRICTIONS UNDER 40 CFR 268. AS HAZARDOUS LIQUID WASTE, IT MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS IN A PERMITTED WASTE TREATMENT/STORAGE/DISPOSAL FACILITY.

Handling And Storage Precautions: STORE IN A COOL, DRY AREA AWAY FROM INCOMPATIBLE MATERIAL. DO NOT STORE IN DIRECT SUNLIGHT. STORE ABOVE FREEZING POINT. AVOID BREATHING VAPOR/MIST/AEROSOL. USE ONLY WITH ADEUATE VENTILATION. STORAGE TEMPERATURE: AMBIENT. STORAGE PRESSURE: AMBIENT.

Other Precautions: DO NOT GET PRODUCT IN EYES, ON SKIN OR ON CLOTHING. WEARRECOMMENDED PROTECTIVE EQUIPMENT. WASH THOROUGHLY AFTER HANDLING THISPRODUCT.

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Fire and Explosion Hazard Information
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Flash Point Text: DOES NOT FLASH

Extinguishing Media: WATER FOG, FOAM, CO2, OR DRY CHEMICALS.

Fire Fighting Procedures: USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE. USE EXTREME CAUTION WHEN USING WATER-CAN CAUSE A VIOLENT REACTION-BOILING, SPLATTERING, ETC. FIREFIGHTERS SHOULD WEAR FULL PROTECTIVE EQUIPMENT, INCLUDING SELF-CONTAINED BREATHING AP PARATUS.

Unusual Fire/Explosion Hazard: THIS PRODUCT WILL GENERATE FLAMMABLE/EXPLOSIVE HYDROGEN GAS ON CONTACT WITH MANY SOFT METALS (IE ALUMINUM). DILUTE SOLUTIONS MAY STILL BE CORROSIVE. PRODUCT MAY PRODUCE HAZARDOUS FUMES OR HAZARDOUS DECOMPOSITION PRODUCTS.

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Control Measures

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Respiratory Protection: FOR EXPOSURES ABOVE OSHA PEL OR ACGIH-TLV, WEAR A NIOSH APPROVED FULL FACE-PIECE OR HALF MASK AIR- PURIFYING CARTRIDGE RESPIRATOR EQUIPPED WITH AN APPROPRIATE ACID GAS CARTRIDGE, OR SUPPLIED AIR.
Ventilation: USE LOCAL OR GENERAL MECHANICAL EXHAUST VENTILATION CAPABLE OF MAINTAINING EMISSIONS IN THE WORK AREA BELOW THE PEL/TLV.
Protective Gloves: NEOPRENE OR PVC.
Eye Protection: CHEMICAL GOGGLES OR FACE SHIELD UNLESS WEARING FULL FACE PIECE RESPIRATOR.
Other Protective Equipment: WEAR A NEOPRENE OR PVC APRON, OR FULL PROTECTIVE CLOTHING WHEN HANDLING THIS PRODUCT. AN EYE WASH STATION AND SAFETY SHOWER SHOULD BE AVAILABLE IN THE WORK AREA. NEOPRENE BOOTS.
Work Hygienic Practices: WASH HANDS AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDRER CONTAMINATED CLOTHING BEFORE REUSE.
Supplemental Safety and Health: CID-A-A-55828
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Physical/Chemical Properties
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HCC: C1
Boiling Point: =281.C, 537.8F
Melt/Freeze Pt: =-34.C, -29.2F
Vapor Pres: NO DATA
Vapor Density: >1
Spec Gravity: 1.8279
PH: <1.0
Solubility in Water: COMPLETE
Appearance and Odor: CLEAR, COLORLESS LIQUID WITH NO CHARACTERISTIC ODOR.
Percent Volatiles by Volume: 100%
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Reactivity Data
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Stability Indicator: YES
Stability Condition To Avoid: AVOID EXCESSIVE HOT AND COLD TEMPERATURES.
Materials To Avoid: ALKALIS, ORGANIC MATERIAL, POWDERED METAL, CHLORINE RELEASERS, SULFIDES, CYANIDES, OXIDIZERS, AMINES, COMBUSTIBLE MATERIALS, AND ANHYDRIDES.
Hazardous Decomposition Products: WHEN HEATED TO DRYNESS AND DECOMPOSITION, THIS PRODUCT EMITS TOXIC OXIDES OF SULFUR.
Hazardous Polymerization Indicator: NO
Conditions To Avoid Polymerization: WILL NOT OCCUR.
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Toxicological Information
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Toxicological Information: EYE CONTACT: RABBIT: 5 MG/30 SECONDS (RINSED): SEVERE. ORAL RAT LD50: 2.140 MG/KG. INHALATION RAT LC50: 510 MG/M3/2 HOURS. HUMAN DATA: INHALATION TCLO: 3 MG/M3/24 WEEKS. OTHER TOXICOLOGICAL DATA: INHALATION MOUSE LC50: 320 MG/KG/2HOURS. T ERATOGENICITY: INHALATION RABBIT TCLO: 20 MG/M3/7 HOURS (6-18 DAYS PREGNANT). MUTAGENICITY: CYTOGENETIC ANALYSIS-HAMSTER OVARY: 4 MMOL/L. TARGET ORGANS: EYES, SKIN, LUNGS.
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Ecological Information
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Ecological: THIS PRODUCT WILL AFFECT THE PH OF WATER. NO SPECIFIC ENVIRONMENTAL FATE DATA IS AVAILABLE. NO AQUATIC TOXICITY IS AVAILABLE FOR SULFURIC ACID SOLUTIONS. THIS PRODUCT WILL AFFECT THE PH OF THE WATER WHICH DOES AFFECT AQUATIC LIFE. RAINBOW T ROUT LC50 PH=4.0 FOR A 7 DAY BIOASSAY. OTHER SPECIES MAY VARY ON PH SUSCEPTIBILITY.

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MSDS Transport Information
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Transport Information: DOT PROPER SHIPPING NAME: SULFURIC ACID, HAZARD CLASS 8, UN1830, PKG II, PRIMARY LABEL: CORROSIVE. SUBSIDIARY LABEL: NONE REQUIRED. PRIMARY /SUBSIDIARY PLACARDS: CORROSIVE. DOT REPORTABLE QUANTITY (RQ): 1000 LBS (H2SO4). RQ FOR PRODUCT: 1, 075 LBS (70.6 GALLONS). MARINE POLLUTANT: NO. DOT 1996 NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NO.: 157. TDG PROPER SHIPPING NAME: SULFURIC ACID, HAZARD CLASS: 8(9.2), UN1830, PKG II, PRIMARY LABEL: CORROSIVE. SUBSIDIARY LABEL: NONE REQUIRED. PRIMARY/SUBSIDIARY PLACARDS: CORROSIVE. TDG REPORTABLE QUANTITY (RQ): 5 LITERS OR KG. REGULATED LIMIT (RL): 50KG H2SO4). RL FOR PRODUCT: 53.8KG(29.4 L).

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Regulatory Information
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Sara Title III Information: SECTION 302 & 303 (40 CFR 355): LISTED SUBSTANCE: YES, REPORTABLE QUANTITY: 1,000 POUNDS. PLANNING THRESHOLD 1,000 POUNDS. SECTION 311 & 312 (40 CFR 370): HAZARD CATEGORIES (PRODUCT): REACTIVE, ACUTE HEALTH, CHRONIC HEALTH. PLANNING THRESHOLD : 1,000 POUNDS. SECTION 313 (40 CFR 372): LISTED TOXIC CHEMICAL: YES (STRONG ACID MIST). REPORTING THRESHOLD: 10,000 POUNDS.

Federal Regulatory Information: US EPA REQUIREMENTS: RELEASE REPORTING; CERCLA(40 CFR 302), LISTED SUBSTANCE: YES. REPORTABLE QUANTITY: 1,000 POUNDS, CATEGORY: C. U.S. TSCA STATUS: LISTED (40 CFR 710): YES.

State Regulatory Information: STATE RIGHT TO KNOW LAWS: MA, NJ, PA.

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Other Information
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Other Information: CANADIAN REGULATIONS: CONTROLLED PRODUCT: YES. W HAZARD SYMBOLS: MATERIALS CAUSING IMMEDIATE AND SERIOUS EFFECTS, CORROSIVE MATERIAL. W CLASS & DIVISION: D.1A, E. INGREDIENT INFORMATION: IDL SUBSTANCE: YES. DOMESTIC SUBSTANCE LIST: YES. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) CLASSIFIED "STRONG INORGANIC ACID MISTS CONTAINING SULFURIC ACID" AS A GROUP 1 CARCINOGEN, A SUBSTANCE THAT IS "CARCINOGENIC TO HUMANS". THIS CLASSIFICATION IS FOR INORGANIC ACID MISTS ONLY AND DOES NOT APPLY TO SULFURIC ACID OR SULFURIC ACID SOLUTIONS.

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Transportation Information
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Responsible Party Code: 0W4M8
Trans ID NO: 151087
Product ID: SULFURIC ACID, 66 BAUME (93% ALL GRADES)
MSDS Prepared Date: 05/27/1999
Review Date: 01/19/2000
MFN: 2
Net Unit Weight: 198.1 LBS
Multiple KIT Number: 0
Unit Of Issue: DR
Container QTY: 13 GALLON
Type Of Container: DRUM

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Detail DOT Information
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DOT PSN Code: NUC
DOT Proper Shipping Name: SULFURIC ACID
DOT PSN Modifier: WITH MORE THAN 51 PERCENT ACID

Hazard Class: 8
UN ID Num: UN1830
DOT Packaging Group: II
Label: CORROSIVE
Special Provision: A3, A7, B3, B83, B84, N34, T9, T27
Packaging Exception: NONE
Non Bulk Pack: 202
Bulk Pack: 242
Max Qty Pass: 1 L
Max Qty Cargo: 30 L
Vessel Stow Req: C
Water/Ship/Other Req: 14

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Detail IMO Information
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IMO PSN Code: OFJ
IMO Proper Shipping Name: SULPHURIC ACID
IMO PSN Modifier: ,WITH MORE THAN 51% ACID
IMDG Page Number: 8230
UN Number: 1830
UN Hazard Class: 8
IMO Packaging Group: II
Subsidiary Risk Label: -
EMS Number: 8-06
MED First Aid Guide NUM: 700

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Detail IATA Information
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IATA PSN Code: XIX
IATA UN ID Num: 1830
IATA Proper Shipping Name: SULPHURIC ACID
IATA PSN Modifier: WITH MORE THAN 51% ACID
IATA UN Class: 8
IATA Label: CORROSIVE
UN Packing Group: II
Packing Note Passenger: 809
Max Quant Pass: 1L
Max Quant Cargo: 30L
Packaging Note Cargo: 813

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Detail AFI Information
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AFI PSN Code: XIX
AFI Proper Shipping Name: SULPHURIC ACID
AFI PSN Modifier: WITH MORE THAN 51% ACID
AFI Hazard Class: 8
AFI UN ID NUM: UN1830
AFI Packing Group: II
Special Provisions: P4, A3, A7, N34
Back Pack Reference: A12.3

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HAZCOM Label
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Product ID: SULFURIC ACID, 66 BAUME (93% ALL GRADES)
Cage: 0W4M8
Company Name: GREAT WESTERN CHEMICAL COMPANY
Street: 808 S.W. 15TH AVE

City: PORTLAND OR
Zipcode: 97205
Health Emergency Phone: 800-497-7455
Label Required IND: Y
Date Of Label Review: 01/19/2000
Status Code: A
Label Date: 01/19/2000
Origination Code: F
Chronic Hazard IND: Y
Eye Protection IND: YES
Skin Protection IND: YES
Signal Word: DANGER
Respiratory Protection IND: YES
Health Hazard: Severe
Contact Hazard: Severe
Fire Hazard: None
Reactivity Hazard: Severe

Hazard And Precautions: INHALATION: EXPOSURE TO VAPOR/MISTS CAN CAUSE SEVERE IRRITATION AND BURNS TO RESPIRATORY TRACT AND PERMANENT LUNG DAMAGE. EYES: EXPOSURE TO VAPOR/MISTS/LIQUID CAN CAUSE SEVERE EYE IRRITATION OR BURNS, CORNEAL DAMAGE, VISION IMPAIRMENT. SKIN: EXPOSURE CAN CAUSE SEVERE SKIN IRRITATION OR BURNS, DESTRUCTION OF THE DERMIS WITH IMPAIRMENT OF SKIN TO REGENERATE. INGESTION: SEVERE IRRITATION OR BURNS TO THE GASTROINTESTINAL TRACT. CHRONIC: REPEATED INHALATION CAN CAUSE BRONCHITIS, IMPAIRMENT OF LUNG FUNCTION, AND PERMANENT LUNG DAMAGE. REPEATED INHALATION/INGESTION CAN CAUSE EROSION OF TOOTH ENAMEL.

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