

HACH COMPANY -- SULFURIC ACID STANDARD SOLUTION 0.030 N, CAT #413 -- 6810-00-798-9821

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

Product ID:SULFURIC ACID STANDARD SOLUTION 0.030 N, CAT #413

MSDS Date:04/17/1995

FSC:6810

NIIN:00-798-9821

Status Code:A

MSDS Number: CKBQW

=== Responsible Party ===

Company Name:HACH COMPANY

Box:389

City:LOVELAND

State:CO

ZIP:80539

Country:US

Info Phone Num:970-669-3050

Eme

rgency Phone Num:303-623-5716

Resp. Party Other MSDS Num.:M00585

CAGE:91224

=== Contractor Identification ===

Company Name:HACH CO

Address:5600 LINDBERGH DR

Box:389

City:LOVELAND

State:CO

ZIP:80539

Country:US

Phone:970-669-3050/ 303-623-5716

Contract Num:SP0450-00-M-D450

CAGE:91224

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

Ingred Name:METHYL ALCOHOL

CAS:67-56-1

RTECS #:PC1400000

Minumum % Wt:15.

Maxumum % Wt:25.

OSHA PEL:260 MG/M3;200 PPM

ACGIH TLV:262 MG/M3;200 PPM

ACGIH STEL:328 MG/M3;250 PPM  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:SULFURIC ACID  
CAS:7664-93-9  
RTECS #:WS5600000  
&lt; Wt:.1  
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

Ingred Name:WATER  
CAS:7732-18-5  
RTECS #:ZC0110000  
Minumum % Wt:75.  
Maxumum % Wt:85.

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

LD50 LC50 Mixture:NONE REPORTED.  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcin  
ogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:METHANOL IS A CUMULATIVE POISON.  
METHANOL MAY CAUSE VISUAL IMPAIRMENT AND POSSIBLY BLINDNESS BY  
REPEATED OR PROLONGED EXPOSURE. MAY BE FATAL OR CAUSE BLINDNESS IF  
SWALLOWED. CAN NOT BE MADE NONPOISION OUS . VAPOR HARMFUL. HARMFUL  
IF ABSORBED THROUGH SKIN. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT  
IRRITATION. TARGET ORGANS: OPTIC NERVE, CENTRAL NERVOUS SYSTEM,  
CARDIOVASCULAR SYSTEM.

Explanation of Carcin  
ogenicity:CONTAINS AN EXPERIMENTAL TERATOGEN.  
Effects of Overexposure:EYE: MAY CAUSE IRRITATION. SKIN: MAY CAUSE  
IRRITATION. SKIN: HARMFUL IF ABSORBED THROUGH THE SKIN. INGESTION:  
TOXIC CANNOT BE MADE NON-TOXIC. METHANOL MAY CAUSE IRRITATIONOF  
EYES, VISUAL IMPAIRMENT OR BLINDNESS. CAUSES CARDIVASCULAR EFFECTS  
SUCH AS CARDIAC DESPRSSION AND BLOOD PRESSURE CHANGES.CAUSES  
CENTRAL NERVOUS SYSTEM DEPRESSION, SYMPTOM MAY INCLUDED:  
DRUNKENNESS, DROWSINESS, DIZZINESS, LIGHTH EADED

NESS,  
UNCONSCIOUSNESS AND COMA. MAY CAUSE HEADACHE WEAKNESS NAUSEA  
VOMITING DEATH. INHALATION: METHANOL MAY CAUSE HEADACHE, WEAKNESS,  
NAUSEA, VOMITING.  
Medical Cond Aggravated by Exposure: PRE-EXISTING SKIN CONDITIONS AND  
EYE CONDITIONS.

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

First Aid: EYE CONTACT: IMMEDIATELY FLUSH EYES WITH WATER FOR 15  
MINUTES. CALL PHYSICIAN. SKIN CONTACT: WASH SKIN WITH PLENTY OF  
WATER FOR 15 MINUTES. CALL PHYSICIAN IF I  
RRITATION DEVELOPS.  
INGESTION: CALL PHYSICIAN IMMEDIATELY. ONLY INDUCE VOMITING AT THE  
INSTRUCTIONS OF A PHYSICIAN. NEVER GIVE ANYTHING BY MOUTH TO AN  
UNCONSCIOUS PERSON. INHALATION: REMOVE TO FRESH AIR. GIVE  
ARTIFICIAL RESPIRATION IF NECESSARY. CALL PHYSICIAN.

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

Flash Point Method: CC  
Flash Point: =54.4C, 130.F  
Autoignition Temp: Autoignition Temp Text: ND  
Lower Limits: ND  
Upper Limits: ND  
Extinguishing Media: WATER  
, CARBON DIOXIDE AND DRY CHEMICAL.  
Fire Fighting Procedures: AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING  
APPARATUS PRESSURE-DEMAND AND FULL PROTECTIVE GEAR.  
Unusual Fire/Explosion Hazard: FLAMMABLE LIQUID. DO NOT EXPOSE TO  
FLAMES. DO NOT EXPOSE TO SPARKS OR OTHER IGNITION SOURCES. MAY  
REACT VIOLENTLY WITH: STRONG OXIDIZERS.

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

Spill Release Procedures: RELEASES OF THIS MATERIAL MAY CONTAMINATE THE  
ENVIRONMENT. REMOVE  
ALL COMBUSTIBLE MATERIAL FROM SPILL AREA. REMOVE  
ALL IGNITION AND SPARK-CREATING SOURCES FROM THE SPILL AREA. COVER  
SPILLED LIQUID WITH A COMMERCIALY AVAILABLE FLAMMABLE LIQUID  
SORBENT SUCH AS VAPOR BARRIER BLANKET OR ACTIVATED CARBON TO AVOID  
EVOLUTION OF FUMES. VAPORS MAY TRAVEL TO A SOURCE OF IGNITION AND  
FLASH BACK.  
Neutralizing Agent: NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

Handling and Storage Prec

Precautions: AVOID CONTACT WITH EYES, SKIN AND CLOTHING. DO NOT BREATHE MIST OR VAPORS. WASH THOROUGHLY AFTER HANDLING. MAINTAIN GENERAL INDUSTRIAL HYGIENE PRACTICES WHEN USING THIS PRODUCT.. STORAGE: KEEP AWAY FROM SPARKS, FLAMES AND OTHER IGNITION SOURCES. PROTECT FROM HEAT.

Other Precautions: SPILL OR RELEASE: MAY BE IGNITED BY: HEAT SPARKS, OR FLAMES. MATERIAL WILL FLOAT ON WATER CREATING A FIRE HAZARD. DIKE THE MATERIAL TO CREATE A BARRIER TO COMBUSTIBLES. MATERIAL CONTAINS

A COMPONENT WHICH IS REGULATED AS A HAZARDOUS AIR POLLUTANT. PRODUCT IS REGULATED AS RCRA HAZARDOUS WASTE.

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

Respiratory Protection: LABORATORY FUME HOOD.

Ventilation: GENERAL VENTILATION

Protective Gloves: DISPOSABLE LATEX GLOVES.

Eye Protection: SAFETY GLASSES WITH TOP AND SIDE SHIELDS.

Other Protective Equipment: LAB COAT

Work Hygienic Practices: MAINTAIN GENERAL INDUSTRIAL HYGIENE PRACTICES WHEN USING THIS PRODUCT.

WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

AVOID CONTACT WITH: EYES, SKIN AND CLOTHING. DO NOT BREATHE:

MIST/VAPOR. WASH THOROUGHLY AFTER HANDLING. KEEP AWAY FROM: SPARKS, FLAMES AND OTHER IGNITION SOURCES. PROTECT FROM HEAT.

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

HCC: F4

Boiling Pt: =82.C, 179.6F

Melt/Freeze Pt: M.P/F.P Text: ND

Vapor Pres: ND

Vapor Density: ND

Spec Gravity: 0.963

pH: 1.7

Evaporation Rate & Reference: 1.35(WATER=1)

Solubi

lity in Water: SOLUBLE

Appearance and Odor: CLEAR, COLORLESS LIQUID, ALCOHOLIC ODOR.

Percent Volatiles by Volume: ND

Corrosion Rate: 0.0173 IN/YR STEEL

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

Stability Indicator/Materials to Avoid: YES

NONE REPORTED

Stability Condition to Avoid: STABLE WHEN STORED UNDER PROPER

CONDITIONS. AVOID CONTACT WITH HEAT, SPARKS, OPEN FLAMES OR OTHER IGNITION SOURCES.

Hazardous Decomposition Products: TOXIC FUMES OF CARBON MONOXIDE.

Condi

ons to Avoid Polymerization:WILL NOT OCCUR.

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

Toxicological Information:PRODUCT TOXICOLOGICAL DATA: LD50: NONE  
REPORTED. LC50: NONE REPORTED. DERMAL TOXICITY: METHANOL: SKIN  
MONKEY LDLO=393 MG/KG; SKIN RABBIT LD50=15800 MG/KG. SKIN & EYE  
IRRITATION DATA: NONE REPORTED. MU TATION DATA: METHANOL: DNA  
INHIBITION-HUMAN-LYMPHOCYTES-300 MMOL/L; DNA DAMAGE-ORAL  
RAT-10UG/KG. REPRODUCTIVE EFFECTS DATA: METHANOL:INHALAT  
ION MOUSE  
1500 PPM/6H SPECIFIC DEVELOPMENT ABNORMALITIES-CEN TRAL NERVOUS  
SYSTEM. INHALATION RAT 10000 PPM/7HR EMBRYO OR FETUS-FETOTOXICITY.  
INGREDEINT DATA: METHANOL: ORAL HUMAN LDLO=143 MG/KG; ORAL RAT  
LD50=5628 MG/KG. INHALATION RAT LC50=64000 PPM/4HR.

===== Ecological Information =====

Ecological:PRODUCT ECOLOGICAL DATA AVAILABLE FOR THIS PRODUCT: NO  
ECOLOGICAL DATA AVAILABLE FOR THIS PRODUCT. INGREDIENT ECOLOGICAL  
DATA: NO ECOLOGIC  
AL DATA AVAILABLE FOR THE INGREDIENTS OF THIS  
PRODUCT.

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

Waste Disposal Methods:ELIMINATE ALL SOURCES OF IGNITION. DO NOT  
BREATHE THE FUMES. USE ONLU NON-SPARKING TOOLS. INCINERATE MATERIAL  
AT AN E.P.A. APPROVED HAZARDOUS WASTE FACILITY. EMPTY CONTAINERS:  
RINSE THREE TIMES WITH A ND APPROPRTIATE SOLVENT. DISPOSE OF EMPTY  
CONTAINER AS NORMAL TRASH.

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

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Transport Information:US DOT PROPER SHIPPING NAME : ALCOHOL, N.O.S.  
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