

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

Emerge

ncy 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

ACG

IH 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
< 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 Carcinoge
nicity: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 Carcinoge
nicity: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 EADEDNES

S,
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 IRRITATION 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, C

ARBON 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 Precaut

ions: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)
Solubility 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.
Conditions

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:INHALATION MOUSE 1500 PPM/6H SPECIFIC DEVELOPMENT ABNORMALITIES-CEN TRAL NERVOUS SYSTEM. INHALATION RAT 10000 PPM/7HR EMBRYO OR FETUS-FETOTOXICITY. INGREDINT 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 ECOLOGICAL 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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