

HACH COMPANY -- 42453, BUFFER SOLUTION HARDNESS 1 PH 10.1 +/- 0.1 -- 6810-00-798-9709  
===== Product Identification =====

Product ID:42453, BUFFER SOLUTION HARDNESS 1 PH 10.1 +/- 0.1

MSDS Date:05/03/2000

FSC:6810

NIIN:00-798-9709

Status Code:A

MSDS Number: CLJSX

=== 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.:MSDS NUMBER: M00305

CAGE:UO405

=== Contractor Identification ===

Company Name:HACH COMPANY

Box:389

City:LOVELAND

State:CO

ZIP:80539

Country:US

Phone:970-669-3050

CAGE:UO405

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

Ingred Name:ACETIC ACID

CAS:64-19-7

RTECS #:AF1225000

Minimum % Wt:1.

Maximum % Wt:10.

OSHA PEL:10 PPM

ACGIH TLV:10 PPM

ACGIH STEL:15 PPM

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:DEMINERA

LIZED WATER  
CAS:7732-18-5  
RTECS #:ZC0110000  
Minumum % Wt:35.  
Maxumum % Wt:45.

Ingred Name:OTHER COMPONENTS  
&lt; Wt:1.

Ingred Name:AMINOMETHYLPROPANOL  
CAS:124-68-5  
RTECS #:UA5950000  
Minumum % Wt:50.  
Maxumum % Wt:60.

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

LD50 LC50 Mixture:C/CE..PLS FILL OUT THIS SECTION  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:EYE: CAUSES EYE BURNS. SKIN CONTACT:  
CAUSES MILD IRRITATION. SKIN ABSOR  
PTION: WILL BE ABSORBED THROUGH  
THE SKIN. INGESTION: MAY CAUSE: ABDOMINAL PAIN. INHALATION: MAY  
CAUSE: RESPIRATORY TRACT IRRITATI ON. CHRONIC EFFECTS: NONE  
REPORTED.

Explanation of Carcinogenicity:THIS PRODUCT DOES NOT CONTAIN ANY OSHA  
LISTED CARCINOGENS.THIS PRODUCT DOES NOT CONTAIN ANY IARC LISTED  
CHEMICALS. THIS PRODUCT DOES NOT CONTAIN ANY NTP LISTED CHEMICALS.  
ADDITIONAL CANCER/REPRODUCTI VE TOXICITY INFORMATION: CONTAINS: AN  
EXPERIMENTAL MUTAGEN.

Medical Cond A  
ggravated by Exposure:PRE-EXISTING: EYE CONDITIONS, SKIN  
CONDITIONS, RESPIRATORY CONDITIONS.

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

First Aid:EYE: IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. CALL  
PHYSICIAN. SKIN CONTACT (FIRST AID): WASH SKIN WITH PLENTY OF  
WATER. CALL PHYSICIAN IF IRRITATION DEVELOPS. INGESTION (FIRST  
AID): GIVE LARG E QUANTITIES OF WATER. CALL PHYSICIAN IMMEDIATELY.  
INHALATION: REMOVE TO FRESH AIR.

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= Fire Fighting Measures =====

Flash Point Method:CC

Flash Point:>97.2C, 207.F

Autoignition Temp:Autoignition Temp Text:NOT DE

Lower Limits:NOT DETERMIN

Upper Limits:NOT DETERMIN

Extinguishing Media:WATER, DRY CHEMICAL, CARBON DIOXIDE, ALCOHOL FOAM.

Fire Fighting Procedures:AS IN ANY FIRE, WEAR SELF CONTAINED BREATHING APPARATUS PRESSURE-DEMAND AND FULL PROTECTIVE GEAR

Unusual Fire/Explosion Hazard:MAY REACT VOILENTLY WITH: STRONG OXIDIZERS. CAN BURN IN FIRE, RELEASING TOXIC VAPORS.

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

Spill Release Procedures:ONLY PERSONS PROPERLY QUALIFIED TO RESPOND TO AN EMERGENCY INVOLVING HAZARDOUS SUBSTANCES MAY RESPOND TO A SPILL ACCORDING TO FEDERAL REGULATIONS (OSHA 29 CFR 1910.120(A)(V) & PER YOUR COMPANY'S EMERG ENCY RESPONSE PLAN & GUIDELINES/PROCEDURES.

ABSORB SPILLED LIQUID WITH NON-REACTIVE SORBENT MATERIAL. DIKE LARGE SPILLS TO KEEP SPILLED MATERIAL FROM ENTERING SEWAGE/DRA INAGE

SYSTEMS/BODIES OF WATER.

Neutralizing Agent:SULFURIC OR CITRIC ACID.

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

Handling and Storage Precautions:HANDLING: AVOID CONTACT WITH EYES, SKIN, CLOTHING. DO NOT BREATHE MIST OR VAPORS. WASH THOROUGHLY AFTER HANDLING. MAINTAIN GENERAL INDUSTRIAL HYGIENE PRACTICES WHEN USING THIS PRODUCT. STORAGE: STORE AWAY FROM: OXIDIZERS. PROTECT FROM: HEAT. FLAMMABILITY CLASS: IIIB

Other Precautions:CLEAN UP TECHNIQU

E-COVER SPILLED MATERIAL WITH A DRY

ACID, SUCH AS CITRIC OR BORIC. SCOOP UP SLURRY INTO A LARGE BEAKER. DILUTE WITH WATER. ADJUST TO A PH BETWEEN 6-9 WITH AN ACID, SUCH AS SULFURIC OR CITRIC. FLUSH REACTED MATERIAL TO THE DRAIN WITH WATER. DECONTAMINATE THE AREA WITH WEAK ACID SOLUT ION.

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

Ventilation:ADEQUATE VENTILATION.

Protective Gloves:DISPOSABLE LATEX GLOVES.

Eye Protection:CHEMICAL SPLASH GOGGLES.

Other P

rotective Equipment:HAVE EYEWASH STATION NEARBY. LAB COAT.

Work Hygienic Practices:MAINTAIN GENERAL INDUSTRIAL HYGIENE PRACTICES WHEN USING THIS PRODUCT. AVOID CONTACT WITH: EYES, SKIN, CLOTHING. DO NOT BREATHE: MIST/VAPOR. WASH THOROUGHLY AFTER HANDLING. KEEP AWAY FROM: OXIDIZERS.

Supplemental Safety and Health

EMPTY CONTAINERS: RINSE THREE TIMES WITH AN APPROPRIATE SOLVENT. DISPOSE OF EMPTY CONTAINER AS NORMAL TRASH. NOTICE(DISPOSAL)-THESE DISPOSAL GUIDELINES ARE BASED ON FEDERAL REGULATIONS & MAY BE SUPERCEDED BY MORE STRINGENT STATE OR LOCAL REQUIREMENTS. PLEASE CONSULT YOUR LOCAL ENVIRONMENTAL REGULATORS FOR MORE INFO.

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

HCC:B3

Boiling Pt:=104.4C, 220.F

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

Vapor Pres:NOT DETERMINED

Vapor Density:NOT DETERM

Spec Gravity:1.033 (WATER=1)

pH:10.0(2% SOL)

Evaporation Rate & Reference:0.36 (WATER=1)

Solubility in Water:SOLUBLE

Appearance and Odor:C

LEAR, YELLOW LIQUID, VINEGAR ODOR

Corrosion Rate:STEEL:0.002 IN/YR

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

Stability Indicator/Materials to Avoid:YES

MAY REACT VOILENTLY IN CONTACT WITH: OXIDIZERS

Stability Condition to Avoid:STABLE WHEN STORED UNDER PROPER CONDITIONS. AVOID: EXTREME TEMPERATURES.

Hazardous Decomposition Products:TOXIC FUMES OF: NITROGEN OXIDES, CARBON DIOXIDE, CORBON MONOXIDE

Conditions to Avoid Polymerization:WILL NOT OCCUR

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

Toxicological Information:PRODUCT TOXICITY DATA: NONE REPORTED. SKIN & EYE IRRITATION DATA: AMINOMETHYLPROPANOL: SKIN AT 1 HOUR EXCPOSURE; ERTHEMA SCORE OF 1 @ 1HOUR, EDEMA SCORE OF 0.67 @1HOUR-MILD; SKIN AT 4 HOURS EXPOSURE: ERTHEMA SCORE OF 1.33 @1 HOUR, EDEMA SCORE OF 1.67@ 1 HOUR-MILD. MUTATION DATA: ACETIC ACID: HUMAN SISTER CHROMATID EXCHANGE IN LYMPHOCYTES AT 5 MMOL/L. REPRODUCTIVE EFFECTS DATA: NONE REPORTED.

INGREDIENTS TOXICOLOGICAL DATA:

AMINOMETHYLPROPANOL: ORAL RAT LD50=2900 MG/KG; ACETIC ACID: ORAL RAT LD50=3310 MG/KG.

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

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

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

Waste Disposal Methods:DILUTE TO 3 TO 5 TIMES THE VOLUME WITH COLD WATER. ADJUST TO A PH BETWEEN 6 AND 9 WITH AN ACID, SUCH AS SULFURIC OR CITRIC. OPEN COLD WATER TAP COMPLETELY, SLOWLY POUR THE REACTED MATERIAL TO THE DRAIN. ALLOW COLD WATER TO RUN FOR 5 MINUTES TO COMPLETELY FLUSH THE SYSTEM.

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

Transport Information:D.O.T: NOT CURRENTLY REGULATED. I.C.A.O.: NOT CURRENTLY REGULATED. I.M.O.: NOT CURRENTLY REGULATED.

===== Regulatory Information =====

SARA Title III Information:SARA TITLE III SECTION 311/312 CATEGORIZATION (40 CFR 370): IMMEDIATE (ACUTE) HEALTH HAZARD. SARA TITLE III SECTION 313 (40 CFR 372): THIS PRODUCT DOES NOT CONTAIN ANY CHEMICAL SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF SARA.

Federal Regulatory Information:O.S.H.A.: THIS PRODUCT MEETS THE CRITERIA FOR A HAZARDOUS SUBSTANCE AS DEFINED IN THE HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200). 302 (EHS) TPQ (40 CFR 355): NOT APPLICABLE. 304 CERCLA RQ (40 CFR 302.4): ACETIC ACID 5000 LBS. 304 EHS (40 CFR 355): NOT APPLICABLE. CLEAN WATER ACT (40 CFR 116.4): ACETIC ACID-RQ 5000 LBS. RCRA: CONTAINS NO RCRA REGULATED SUBSTANCES. C.P.S.C.: NOT APPLICABLE. U. S. INVENTORY STATUS: ALL INGREDIENTS IN THIS PRODUCT ARE LISTED ON THE TSCA 8(B) INVENTORY (40 CFR 71.0)> TSCA CAS NUMBER: NOT APPLICABLE. TRADE SECRET REGISTRY: NOT APPLICABLE.

State Re

gulatory Information:CALIFORNIA PROP. 65: NO 65 LISTED  
CHEMICALS ARE PRESENT IN THIS PRODUCT. IDENTIFICATION OF PROP. 65  
INGREDIENT(S): NOT APPLICABLE.

===== Other Information =====

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