

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

Minumum % Wt:1.

Maxumum % 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

Protective 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

===== 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.

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= 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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