

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

Eme

rgency 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:DEMIN

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

Ingred Name:OTHER COMPONENTS
< 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 AB
SORPTION: 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 Con
d Aggravated 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.

=====

==== 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, RELEAS ING 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/ DRAINAGE

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 TECHN

IQUE-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.

Othe

r 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 O
N FEDERAL REGULATIONS & MAY BE
SUPERCE DED 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 Odo
r:CLEAR, 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 REPORTE

D. 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 STAND

ARD (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

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

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

=====

Disclaimer (provided with this information by the compiling agencies):
This information is formulated for use by elements of the Department
of Defense. The United States of America in no man
er whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of this information to their
particular situation.