

HACH CO. -- CITRIC ACID -- 4410-01-183-7442

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

Product ID:CITRIC ACID

MSDS Date:05/06/1993

FSC:4410

NIIN:01-183-7442

Kit Part:Y

MSDS Number: BRKTZ

=== Responsible Party ===

Company Name:HACH CO.

Address:5600 LINDBERGH DR

Box:608

City:LOVELAND

State:CO

ZIP:80539

Country:US

Info Phone Num:800-227-4224

Emergency Phone Num:303-623-5716

CAGE:91224

=== Contractor Identifi

cation ===

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

CAGE:91224

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

Ingred Name:CITRIC ACID

CAS:77-92-9

RTECS #:GE7350000

Fraction by Wt: 100%

Other REC Limits:NONE SPECIFIED

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

LD50 LC50 Mixture:ORAL RAT LD50 6730 MG/KG

Routes of Entry: Inhalation:YES Skin:YES Ingestion:

YES

Reports of Carcinogenicity:NTP:UNKNOWN IARC:UNKNOWN OSHA:NO
Health Hazards Acute and Chronic:PRODUCT IS IRRITATING TO EYES, SKIN
AND RESPIRATORY TRACT

Effects of Overexposure:CAUSES SEVERE EYE AND MODERATE SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION. CHRONIC OVEREXPOSURE MAY
CAUSE EFFECTS DUE TO THE ABILITY OF CITRIC ACID TO CHELATE METALS,
WHICH COULD IMPAIR THE BODY'S ABILITY TO ABSORB CALCIUM AND IRON.

Medical Cond Aggravated by Exposure:PRE-EXISTING EYE, SKIN AND
RESPIRATORY TRACT CONDITIONS.

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

First Aid:EYE AND SKIN CONTACT: IMMEDIATELY FLUSH EYES WITH WATER FOR
15 MINUTES. CALL PHYSICIAN. SKIN: FLUSH WITH PLENTY OF WATER.
INGESTION: GIVE LARGE QUANTITIES OF WATER. CALL A PHYSICIAN
IMMEDIATELY. INHALATION: REMOVE TO FRESH AIR.

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

Flash Point:NONE
Autoignition Temp:Autoignition Temp Text:NONE
Extinguishing Media:WATER, CARBON DIOXIDE, OR DRY CHEMICAL
Fire Fighting Procedures:NONE SPECIFIED BY MANUFACTURER.
Unusual Fire/Explosion Hazard:POTENTIALLY EXPLOSIVE REACTION WITH METAL
NITRATES.

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

Spill Release Procedures:SCOOP SPILLED MATERIAL INTO A BEAKER AND
DISSOLVE WITH WATER. NEUTRALIZE TO A PH BETWEEN 6 AND 9 WITH ALKALI
SUCH AS SODA ASH. FLUSH NEUTRALIZED WASTE TO THE DRAIN WITH AN
EXCESS OF WATER.
Neutralizing Agent:SODA ASH

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

Handling and Storage Precautions:STORE IN COOL, DRY, WELL VENTILATED
AREA. PROTECT FROM PHYSICAL DAMAGE. AVOID ANY PHYSICAL CONTACT.
KEEP CONTAINERS TIGHTLY CLOSED
Other Precautions:WASH THOROUGHLY AFTER HANDLING. DO NOT BREATHE DUST.
USE ONLY WITH ADEQUATE VENTILATION. KEEP AWAY FROM OXIDIZERS. AVOID
CONTACT WITH SKIN AND EYES.

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

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Respiratory Protection:NONE SPECIFIED BY MANUFACTURER.
Ventilation:ADEQUATE VENTILATION
Protective Gloves:RUBBER
Eye Protection:LAB GRADE GOGGLES
Other Protective Equipment:EYE WASH, SAFETY SHOWER, LAB COAT OR APRON
Work Hygienic Practices:USE NORMAL CHEMICAL HYGIENE PRACTICES.
Supplemental Safety and Health
KEY 1: HCC T-6. THIS ITEM IS PN IND B OF A 3 PART KIT. SEE PN IND A AND
C UNDER THIS NSN AND CAGE FOR ADDITIONAL INFO. FOR THE KIT.

===== Physical/Chemical Proper
ties =====

HCC:T6
Melt/Freeze Pt:M.P/F.P Text:307F/153C
Spec Gravity:1.54
Solubility in Water:APPRECIABLE
Appearance and Odor:COLORLESS CRYSTALS; NO ODOR. PH 0.IN SOLN = 2.2

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

OXIDIZERS. POTENTIALLY EXPLOSIVE REACTION ON CONTACT WITH METAL
NITRATES.
Stability Condition to Avoid:EXPOSURE TO FLAMES AND MOISTURE
Hazardous Decomposition Products:EMITS ACRID SMOKE AND FUMES IN FIRE.

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

Waste Disposal Methods:DISPOSE IN ACCORDANCE WITH FEDERAL, STATE, LOCAL
REGULATIONS.

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