

STALEY A E MFG CO -- CITRIC ACID, ANHYDROUS -- 6810-00-141-2942

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

Product ID:CITRIC ACID, ANHYDROUS

MSDS Date:07/22/1996

FSC:6810

NIIN:00-141-2942

MSDS Number: CGLQW

=== Responsible Party ===

Company Name:STALEY A E MFG CO

Address:2200 E. ELDORDO ST

Box:151

City:DECATUR

State:IL

ZIP:62525-1801

Country:US

Info Phone Num:217-423-4411

Emergency Phone Num:800-424-9300

(CHEMTREC)

CAGE:KO212

=== Contractor Identification ===

Company Name:CRIMSON ASSOCIATES

Box:UNKNOW

CAGE:05VC9

Company Name:STALEY A E MFG CO

Address:2200 E ELDORADO ST.

Box:151

City:DECATUR

State:IL

ZIP:62525-1801

Country:US

Phone:217-421-2342

CAGE:56488

Company Name:STALEY A E MFG CO

Address:2200 E. ELDORDO ST

Box:151

City:DECATUR

State:IL

ZIP:62525-1801

Country:US

Phone:217-423-4411

CAGE:KO212

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

Ingred Name:CITRIC ACID

CAS:77

-92-9  
RTECS #:GE7350000  
Fraction by Wt: 100%  
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:ORLA RAT LD50=8730MG/KG.  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE:EYE:SEVERELY IRRIT.IF NOT  
REMOVED PROMPTLY MAY INJURE EYE TISSUE AND MAY RESULT IN PERM EYE  
DMG.INGEST:MAY CAUSE GI IRRIT W/NAU,VOMITING,DIARR.INHAL:D  
UST MAY  
CAUSE MILD SYMPTOMS OF RESPIRAORY IR RIT.SKIN:PRODUCT IS CONSIDERED  
MODERATESKIN IRRITANT.CHRONIC:NONE IDENTIFIED.  
Explanation of Carcinogenicity:PER MSDS:NOT CONSIDERED CARC BY  
NTP/IARC/OSHA.  
Effects of Overexposure:PRODUCT CONSIDERED TO BE SEVERE EYE  
IRRIT,MODERATE SKIN IRRIT.CHRONIC:NONE ID.WHEN PARTICULATE LEVELS  
PRESENT IN WORKPLACE ARE SUFFICIENTLY HIGH,TREAT AS NUISANCE  
DUST.DUST MAY BE IRRIT TO NOSE/EYES.  
Medical Cond Aggravated by Exposure:INHAL NUISANCE  
DUST IN WORKRM AIR  
MAY SERIOUSLY REDUCE VISIBILITY,CAUSE UNPLEASANT DEPOSITS IN  
EYES/EARS/NASAL PASSAGES,CAUSE INJURY TO SKIN/MUC MEMBRAN BY  
CHEM/MECH ACTION FRM SKIN CLEANING FOR REMOV

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

First Aid:EYE:IMMED FLUSH W/PLENTY OF WATER.IRRIT DVLPS/PERSIST GET MED  
ATTN.INGEST:SMALL AMTS MAY CAUSE GI IRRIT W/NAU,VOMIT,DIARR.LG AMTS  
DONT INDUCE VOMIT BUT GIVE 1-2 GLASSES OF H2O.SEEK MED  
ATTN.INHAL:REMO VE TO FR  
ESH AIR.GET MED ATTN IF  
NECESSARY.SKIN:REMOVE CONTAM CLOTH.THOROUGHLY WASH EXPO AREA  
W/SOAP/WATER.GET MED ATTN IF IRRIT DVLPS/PERSIST.

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

Flash Point:>212F,>100C  
Autoignition Temp:Autoignition Temp Text:NP  
Lower Limits:NP  
Upper Limits:NP  
Extinguishing Media:WATER SPRAY, CARBON DIOXIDE OR DRY CHEMICAL  
EXTINGUISHERS.  
Fire Fighting Procedures:NONE.BUT AS IN ANY FIRE WEAR NIOSH/MSHA  
APPROVED OR EQUIVALENT SELF-CONTAI

NED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:PRODUCT NOT FLAMM BUT IN CONTACT  
W/REACTIVE METALS CAN FORM FLAMM HYDROGEN GAS.WHEN HEATED TO  
DECOMPOSITION CITRIC ACID EMITS ACRID SMOKE/FUMES.

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

Spill Release Procedures:SWEEP UP W/VACUUM OR BROOM AND SHOVEL & PLACE  
IN CNTNRS FOR DISPO.FLUSH AREA W/WATER TO REMOVE TRACE MATL.FOLLOW  
ALL STATE & LOCAL REQMTS FOR DISPOSAL OF WASTES NOT CURRENTLY  
REGULATED

UNDER RCRA AS H AZ WASTES.

Neutralizing Agent:NOT APPLICABLE;RESIDUE MAY BE NEUTRALIZE W/SODA ASH  
OR SODIUM BICARBONATE.

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

Handling and Storage Precautions:AVOID PROL/REP CONTACT W/SKIN.AVOID  
CONTACT W/EYES.MIN DUST GENERATION/ACCUMULATION.USE ONLY IN  
WELL-VENTI AREA.

Other Precautions:STORE IN TIGHTLY CLSD CNTNR IN DRY COOL WELL-VENTI  
AREA AWAY FROM INCOMPATIBLE MATLS.DONT STORE IN UNLABELED  
CNTNRS.AQUEOUS S

OLN OF CITRIC ACID CAN IF IN CONTACT W/REACTIVE  
METAL(IRON,ZINC,ALUMINUM)FO RM HYDROGEN WHICH MAY FORM  
EXPLO(SUPPLE)

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

Respiratory Protection:USE NIOSH/MSHA APPROVED MASK WHEN WORKING  
CONDITIONS GENERATE DUSTY OR AIRBORNE PARTICULATE CONCENTRATIONS  
ABOVE PERMISSIBLE EXPO LIMIT(PEL)FOR NUISANCE DUST.

Ventilation:USE PROCESS ENCLOSURES,LOC EXHAU VENTI,OTHER ENGINEERING  
CNTRL S TO CNTRL AIRBORNE PARTICULATE CONCE  
N BEL PEL FOR (SUPPL)

Protective Gloves:CHEM RESIST-RUBB(LATEX,NEOPRENE,(SUPPLE)

Eye Protection:SAF GLASSES W/SIDESHIELD,CHEM SPLASH GOG

Other Protective Equipment:CHOICE OF EYE PROTECTION SHOULD BE  
APPROPRIATE TO TASK BEING PERFORMED.USE GOOD INDUSTRIAL HYGIENE  
PRACTICE.

Work Hygienic Practices:LAUNDER CONTAM CLOTH BEF REUSE.PRACTICE GOOD  
HOUSEKEEPING.WASH W/SOAP/WATER.

Supplemental Safety and Health

PH(0.1N% SOLN)=2.2. OTHER PRECAUT:MIXTURES.CAN ALSO FORM EXPLOSIVE  
MIXTURES W/M

ETAL NITRATES. VENTI:NUISANCE DUST. GLVOES:POLYVINYL  
ALCOHOL). DISPO:NOT SUBJ TO SEC 313 SARA/CERCLA.SUBJ TO MSDS/CHEM  
IN VENTORY REPORTING UNDER SEC 311/312 OF SARA.

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

HCC:C3

Boiling Pt:B.P. Text:DECOMPOSES

Melt/Freeze Pt:M.P/F.P Text:307F,153C

Decomp Temp:Decomp Text:NP

Vapor Pres:NA

Vapor Density:NA

Spec Gravity:1.5-1.7

pH:SUPPLE

Viscosity:NP

Evaporation Rate & Reference:NA

Solubility in Water:>50%

Appearance and

Odor:WHITE,ODORLESS POWDER OR GRANULES, SOLID

Percent Volatiles by Volume:NP

Corrosion Rate:NP

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZERS,STRONG BASES,ALKALI METALS ORGANIC ACIDS,METALLIC  
NITRATES,OXIDES OF SULFUR.

Stability Condition to Avoid:MAY DECOMPOSE IF HEATED ABOVE 212F.

Hazardous Decomposition Products:TYPICAL DECOMPOSITION PRODUCTS INCLUDE  
CARBON MONOXIDE AND CARBON DIOXIDE.

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

Waste Disposal Methods:MATL IS NOT KNOWN TO CAUSE SIGNIFICANT ADVERSE  
ENVIRO IMPACT.DISPO OF IN APPROV LANDFILL OR NEUTRALIZE & FLUSH TO  
DRAIN.RESIDUE MAY BE NEUTRALIZED W/SODA ASH OR SODIUM  
BICARBONATE.ALL DISPO PROCEDURES SHOULD BE REVIEWED W/SATE/LOC REG  
AGENCIES.(SUPP)

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