

HAARMANN & REIMER CORP., (FORMERLY MILES, INC.) -- CITRIC ACID, ANHYDROUS, FCC, USP --  
6810-00-141-2942

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

Product ID:CITRIC ACID, ANHYDROUS, FCC, USP

MSDS Date:03/02/1994

FSC:6810

NIIN:00-141-2942

MSDS Number: BJNTP

=== Responsible Party ===

Company Name:HAARMANN & REIMER CORP., (FORMERLY MILES, INC.)

Address:1127 MYRTLE ST

Box:932

City:ELKHART

State:IN

ZIP:46515

Country:US

Info Phone Num:800-348-7414

Emergency Phone Num:800-348-7414

Preparer's Name:R. RUPPEL-KERR

CAGE:KO211

=== Contractor Identification ===

Company Name:CHEMICAL SALES AND SERVICES INC.

Box:UNKNOW

CAGE:86144

Company Name:HAARMANN & REIMER CORP., (FORMERLY MILES, INC.)

Address:1127 MYRTLE ST

Box:932

City:ELKHART

State:IN

ZIP:46515

Country:US

Phone:800-348-7414

CAGE:KO211

Company Name:MILES INC MILES SCIENTIFIC DIV

Address:1127 MYRTLE ST

Box:932

City:ELKHART

State:IN

ZIP:46515

Country:US

P

hone:800-348-7414  
CAGE:5H609

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Composition/Information on Ingredients  
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Ingred Name:CITRIC ACID OR 2-HYDROXY-1,2,3-PROPANETRICARBOXYLIC ACID  
CAS:77-92-9  
RTECS #:GE7350000  
Fraction by Wt: 100%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:5 MG/M3 (R. DUST)  
ACGIH TLV:5 MG/M3 (R. DUST)

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Hazards Identification  
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LD50 LC50 Mixture:NO TOXICITY DATA AVAILABLE.  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE-THIS PRODUCT IS IRRITATING TO THE SKIN & EYES. CHRONIC: NO APPLICABLE INFORMATION WAS FOUND CONCERNING ANY ADVERSE EFFECTS FROM OVEREXPOSURE TO THIS PRODUCT.  
Explanation of Carcinogenicity:THE COMPONENTS OF THIS PRODUCT ARE NOT LISTED BY NTP, IARC OR REGULATED AS A CARCINOGEN BY OSHA.  
Effects of Overexposure:EYE-STINGING, REDDENING, TEARING & SWELLING. SKIN-REDDENING, STINGING, SWELLING.  
Medical Condition Aggravated by Exposure:PERSONS WITH PREEXISTING EYE OR SKIN DISORDERS MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS PRODUCT.

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First Aid Measures  
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First Aid:IN ALL CASES GET MEDICAL ATTENTION. EYES-FLUSH WITH WATER FOR 15 MINUTES. SKIN-REMOVE CONTAMINATED CLOTHES. FLUSH WITH WATER FOR 15 MINUTES. INHALED-REMOVE TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION AS NEEDED. INGESTED-CONTACT POISON CONTROL CENTER OR PHYSICIAN AND OBTAIN IMMEDIATE MEDICAL ATTENTION.

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Fire Fighting Measures  
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Extinguishing Media:WATER, CARBON DIOXIDE, DRY CHEMICAL.  
Fire Fighting Procedures:FIRE FIGHTERS SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS TO PROTECT AGAINST POTENTIALLY TOXIC & IRRITATING FUMES.  
Unusual Fire/Explosion Hazard:AVOID DUSTING. DUST CAN FORM EXPLOSIVE MIXTURES W/AIR.

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Accidental Release Measures  
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Spill Release

Procedures:CLEAN BY VACUUM OR BROOM SWEEPING AND REMOVE TO DISPOSAL CONTAINER.

Neutralizing Agent:SODA ASH OR SODIUM BICARBONATE.

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

Handling and Storage Precautions:STORE BELOW 405F/207C (PRODUCT DETERIORATES) . STORE IN A COOL, DRY PLACE AWAY FROM EXCESSIVE HEAT, IN ORIGINAL OR SIMILAR WATERPROOF CONTAINERS.

Other Precautions:RESEAL CONTAINERS IMMEDIATELY AFTER USE. AVOID BREATHING DUST. AVOID CONTACT WITH EYES & SKIN. WASH THOROUGHLY AFTER HANDLING.

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

Respiratory Protection:WORK AMBIENT CONCENTRATIONS SHOULD BE MONITORED & IF THE RECOMMENDED EXPOSURE LIMIT IS EXCEEDED, A NIOSH/MSHA APPROVED DUST RESPIRATOR SHOULD BE WORN.

Ventilation:USE LOCAL VENTILATION IF DUSTING IS A PROBLEM, TO MAINTAIN AIR LEVELS BELOW THE RECOMMENDED LIMIT.

Protective Gloves:RUBBER OR VINYL GLOVES.

Eye Protection:CHEMICAL SAFETY GOGGLES.

Other

Protective Equipment:LONG SLEEVED SHIRTS & PANTS. EYE-WASH STATIONS, SAFETY SHOWER.

Work Hygienic Practices:EMPLOYEES SHOULD WASH THEIR HANDS & FACE BEFORE EATING, DRINKING OR USING TOBACCO PRODUCTS.

Supplemental Safety and Health

EDUCATE & TRAIN EMPLOYEES IN THE SAFE USE & HANDLING OF THIS PRODUCT.

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

HCC:C3

NRC/State Lic Num:NONE

Decomp Temp:Decomp Text:405F,207C

Solubility in Water:APPRECIABLE

Appearance and Odor:ODOR

LESS, FREE FLOWING WHITE CRYSTALLINE MATERIAL WITH A STRONG ACID TASTE.

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

Stability Indicator/Materials to Avoid:YES

REACTION WITH CAUSTIC CAN CREATE HEAT (STRONG EXOTHERM). SOLUTIONS ARE MILDLY CORROSIVE TO CARBON STEEL.

Stability Condition to Avoid:NONE KNOWN.

Hazardous Decomposition Products:IN CASE OF FIRE; CARBON DIOXIDE, CARBON MONOXIDE AND OTHER POTENTIALLY TOXIC FUMES.

Conditions to Avoid Polymerization:WILL

NOT OCCUR.

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

Waste Disposal Methods:COVER WITH SODA ASH OR SODIUM BICARBONATE TO NEUTRALIZE. MIX & ADD WATER IF NECESSARY. SCOOP UP SLURRY & DISPOSE IN ACCORDANCE WITH EXIXTING FEDERAL, STATE & LOCAL ENVIRONMENTAL CONTROL REGULATIONS.

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