

MATERIAL SAFETY DATA SHEET

I - PRODUCT IDENTIFICATION

COMPANY NAME: Calgon Vestal Laboratories		Tel No: (314)535-1810
ADDRESS: 5035 Manchester Avenue St. Louis, MO 63110		Nights: (314)862-2000 CHEMTREC: (800)424-9300
PRODUCT NAME: Nickel-Safe Ice Machine Cleaner		Product No.: 4287
Synonyms: Acid Cleaner		

II - HAZARDOUS INGREDIENTS OF MIXTURES

MATERIAL:	(CAS#)	(ORAL LD50)	% By Wt.	TLV	PEL
Phosphoric Acid*	(7664-38-2)	(1.5g/kg)	<30	1mg/m3	1mg/m3
Hydroxyacetic Acid	(79-14-1)	(1,950mg/kg)	<10	N/AV	N/AV
*ACGIH Short Term Exposure Limit;3mg/m3					

III - PHYSICAL DATA

Vapor Pressure, mm Hg: Undetermined	Vapor Density (Air=1)60-90F: Undeterm.
Evaporation Rate(ether=1): N/A	% Volatile by wt <5
Solubility in H2O: Complete	pH @ 1% Solution 1.8-2.2
Freezing Point F: N/A	pH as Distributed: N/A
Boiling Point F: Undetermined	Appearance: Amber Liquid
Specific Gravity H2O=1 @25C: 1.85	Odor: Chemical Odor

IV - FIRE AND EXPLOSION

Flash Point F: N/A	Flammable Limits: N/A
Extinguishing Media: Product is not flammable or combustible, use media appropriate for the primary source of fire.	
Special Fire Fighting Procedures: Exercise caution when fighting any fire involving chemicals. Respiratory protection is essential.	
Unusual Fire and Explosion Hazards: Contact with some metals can generate hydrogen gas.	

V - REACTIVITY DATA

Stability - Conditions to avoid: None Known.
Incompatibility: Strong alkalis and oxidizers such as chlorine. Avoid prolonged contact by concentrated product with metals.
Hazardous Decomposition Products: Phosphoric acid and phosphorous oxide fumes. On extended contact with some metals, concentrated product could evolve hydrogen gas.
Conditions Contributing to Hazardous Polymerization: Product will not polymerize.

Nickel-Safe Ice Machine Cleaner  
VI - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE (Medical Conditions Aggravated/Target Organ Effects,  
A. ACUTE (Primary Route of Exposure) EYES:Product is extremely irritating/corrosive to eyes and may result in burns.SKIN:(Primary Route of Exposure)Product is severely irritating/corrosive to skin and contact can result in skin burns.Repeated or prolonged contact with more dilute solution can result in irritation and/or dermatitis. INHALATION:Inhalation of aerosol mist or vapor is irritating to eyes, lungs, throat and nasal passages.INGESTION:May result in abdominal hemorrhage,severe pain,vomiting and loss of consciousness.Necrosis of stomach and gastrointestinal tract may also occur.  
B.SUBCHRONIC,CHRONIC,OTHER: No available information was found.

VII - EMERGENCY AND FIRST AID PROCEDURES

EYES:In case of contact,immediately flush eyes thoroughly with plenty of water for at least 15 minutes.Seek medical aid.SKIN:In case of contact,immediately wash with soap and plenty of water for at least 15 minutes after removing contaminated clothing.Seek medical aid. INHALATION:If inhaled,remove to fresh air.If not breathing,give artificial respiration.If breathing is difficult,give oxygen.Seek medical aid.INGESTION:If swallowed,DO NOT induce vomiting.Give water and seek medical aid immediately.Never give anything by mouth to an unconscious person.

VIII - SPILL OR LEAK PROCEDURES

Spill Management: Contain spill.Cover with sodium bicarbonate mixture (50/50).Mix and add water to form slurry.Place in D.O.T.-approved container for disposal.Wash residue to sanitary sewer with large quantities of water.

Waste Disposal Methods: Dispose of in accordance with all federal, state and local regulations.

IX - PROTECTION INFORMATION/CONTROL MEASURES

Respiratory: Where engineering controls are impractical,use NIOSH-approved respirator appropriate for conditions.	Eye: Chemical Splash Goggles and Face Shield	Glove: Rubber
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Other Clothing and Equipment: Rubber apron and rubber boots.

Ventilation: Use with good general room ventilation or dilution ventilation to maintain air concentrations below established limits.

X - SPECIAL PRECAUTIONS

Precautions to be taken in Handling and Storing: Do not get in eyes, on skin or clothing.Wash thoroughly after handling.Wear goggles or face shield,rubber gloves and protective clothing when handling.  
Additional Information: Keep container closed.Read and observe all label precautions.

Prepared by:R.C.Jente

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