

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					
# Ingredient subject to reporting under Section 313 of Title III (SARA) and 40 CFR 372.					

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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