Ice Machine Cleaner (AFCO 5194)

Safety Data Sheet

Revision Date: 10/21/2026 Version: 2.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Ice Machine Cleaner

Product Code: AFCO 5194

Intended Use of the Product

Use of the Substance/Mixture: Acid cleaner designed for use on ice machines. For professional use only.

Name, Address, and Telephone of the Responsible Party

Company

AFCO
800 Development Avenue
Chambersburg, PA 17201
T: 800-345-1329
www.afcocare.com

Emergency Telephone Number

Emergency Number : 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Met. Corr. 1 H290
Skin Corr. 1B H314
Eye Dam. 1 H318

Label Elements

Hazard Pictograms :



GHS05

Signal Word : Danger

Hazard Statements : H290 - May be corrosive to metals
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage

Precautionary Statements : P234 - Keep only in original container.
P260 - Do not breathe mist if inhalable mists may occur during use.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P280 - Wear protective gloves, eye protection.
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P321 - Specific treatment (see section 4).
P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material damage.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes. Contact with soft metals may evolve flammable hydrogen gas.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances: Not applicable, product is a mixture.

Mixture:

Name	Product identifier	% (w/w)
Water	(CAS No) 7732-18-5	70-80
Phosphoric acid	(CAS No) 7664-38-2	20-30
Citric acid	(CAS No) 77-92-9	1-5

The exact percentage (concentration) of the composition and/or ingredients has been withheld as a trade secret, in accordance with 29 CFR § 1910.1200(i).

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention.

Skin Contact: Remove contaminated clothing. Immediately flush skin with plenty of water for several minutes. Get immediate medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact: Seek medical attention immediately. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye damage. Corrosive to eyes and skin.

Inhalation: None under normal and intended conditions of use.

Skin Contact: Causes severe skin burns.

Eye Contact: Causes serious eye damage.

Ingestion: Ingestion is likely to be harmful or have adverse effects. Contact may cause immediate severe irritation progressing quickly to chemical burns.

Chronic Symptoms: Not available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide, foam, dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Thermal decomposition generates: Corrosive vapors. When heated to decomposition, emits toxic fumes. Corrosive to soft metals.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Phosphorus oxides. Carbon oxides (CO, CO_2). Toxic fumes are released.

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not allow product to spread into the environment. Do NOT breathe (mist, spray). Do not get in eyes, on skin, or on clothing.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: None.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Cautiously neutralize spilled liquid with soda ash or lime.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Cautiously neutralize spilled liquid with soda ash or lime. Contact competent authorities after a spill.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: When heated to decomposition, emits toxic fumes. Corrosive vapors are released. Contact with soft metals may evolve flammable hydrogen gas.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do no eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely high temperature, incompatible materials.

Incompatible Materials: Strong bases. Strong oxidizers. Soft metals.

Special Rules on Packaging: Keep only in original container.

Specific End Use(s): Acid cleaner designed for use on ice machines. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Phosphoric acid (7664-38-2)		
Mexico	OEL TWA (mg/m³)	1 mg/m³
Mexico	OEL STEL (mg/m³)	3 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
USA ACGIH	ACGIH STEL (mg/m³)	3 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³
USA NIOSH	NIOSH REL (STEL) (mg/m³)	3 mg/m³
USA IDLH	US IDLH (mg/m³)	1000 mg/m³
Ontario	OEL STEL (mg/m³)	3 mg/m³
Ontario	OEL TWA (mg/m³)	1 mg/m³
Québec	VECD (mg/m³)	3 mg/m³
Québec	VEMP (mg/m³)	1 mg/m³

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. If user operations generate fumes, vapor, spray, or mist use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal Protective Equipment: Protective goggles. Gloves.



Materials for Protective Clothing: N/A.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles.

Skin and Body Protection: None usually needed.

Respiratory Protection: A respirator is not needed under normal and intended conditions of product use.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Liquid
Particle Characteristics	:	No data available.
Appearance	:	Clear, colorless
Odor	:	Odorless
Odor Threshold	:	Not available
pH	:	<1
Relative Evaporation Rate (butylacetate=1)	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	105°C
Flash Point	:	Not flammable
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not flammable
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20°C	:	Not available
Specific Gravity	:	1.18
Solubility	:	Complete.
Partition coefficient: n-octanol/water	:	Not available
Viscosity	:	Not available
Explosive Properties	:	Not expected to present an explosion hazard.
Oxidizing Properties	:	Not expected to present an oxidizing hazard.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Thermal decomposition generates: Corrosive vapors. When heated to decomposition, emits toxic fumes. Corrosive to soft metals.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Extremely high temperatures. Prolonged contact with soft metals. Incompatible materials.

Incompatible Materials: Strong bases, strong oxidizers.

Hazardous Decomposition Products: Carbon oxides (CO, CO_2). Thermal decomposition generates: Phosphorus oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified.

LD50 and LC50 Data: Not available.

Skin Corrosion/Irritation: Causes severe skin burns. (**pH:** <1)

Serious Eye Damage/Irritation: Causes serious eye damage. (**pH:** <1)

Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified.

Teratogenicity: Not available.

Carcinogenicity: Not classified.

Specific Target Organ Toxicity (Repeated Exposure): Not classified.

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity (Single Exposure): Not classified.

Aspiration Hazard: Not classified.

Symptoms/Injuries After Inhalation: None under normal and intended conditions of use.

Symptoms/Injuries After Skin Contact: Causes severe skin burns.

Symptoms/Injuries After Eye Contact: Causes serious eye damage.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. Contact may cause immediate severe irritation progressing quickly to chemical burns.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Water (7732-18-5)	
LD50 Oral Rat	>90000 mg/kg

Phosphoric acid (7664-38-2)	
LD50 Oral Rat	1530 mg/kg
LD50 Dermal Rabbit	2730 mg/kg
LC50 Inhalation Rat	>850 mg/m³ (Exposure time: 1 h)

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not classified.

Citric acid (77-92-9)	
LC50 Fish 1	440 mg/l (Exposure time: 48 h)
EC50 Daphnia 1	1535mg/l (Exposure time: 24 h - Species: Daphnia magna)

Persistence and Degradability

Ice Machine Cleaner (AFCO 5194)	
Persistence and Degradability	Not established.
Citric acid (77-92-9)	
Persistence and Degradability	Readily biodegradable.

Bioaccumulative Potential

Ice Machine Cleaner (AFCO 5194)	
Bioaccumulative Potential	Not established.

Mobility in Soil Not available.

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)

Hazard Class : 8
Identification Number : UN3264
Label Codes : 8



Packing Group : III
ERG Number : 154

14.2 In Accordance with IMDG

Proper Shipping Name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)
Hazard Class : 8
Identification Number : UN3264
Packing Group : III
Label Codes : 8
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B



14.3 In Accordance with IATA

Proper Shipping Name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)
Packing Group : III
Identification Number : UN3264
Hazard Class : 8
Label Codes : 8
ERG Code (IATA) : 8L



14.4 In Accordance with TDG

Proper Shipping Name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid)
Packing Group : III
Hazard Class : 8
Identification Number : UN3264
Label Codes : 8



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Ice Machine Cleaner (AFCO 5194)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard.

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory.

Phosphoric acid (7664-38-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory.

Citric acid (77-92-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory.

US State Regulations

Phosphoric acid (7664-38-2)
U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic
U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)
U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Special Health Hazards Substances List
U.S. - New York - Occupational Exposure Limits - TWAs
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
RTK - U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Texas - Effects Screening Levels - Short Term

Canadian Regulations

Water (7732-18-5)
Listed on the Canadian DSL (Domestic Substances List) inventory.

Phosphoric acid (7664-38-2)
Listed on the Canadian DSL (Domestic Substances List) inventory.

Citric acid (77-92-9)
Listed on the Canadian DSL (Domestic Substances List) inventory.

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by those regulations.

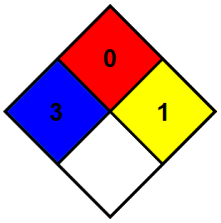
SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 10/21/2026

NFPA Health Hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA Fire Hazard : 0 - Materials that will not burn.

NFPA Reactivity : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



HMIS IV Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken, and medical treatment is given.

Flammability : 0 - Minimal Hazard.

Physical : 1 - Slight Hazard.

Preparation by:

AFCO
800 Development Avenue
Chambersburg, PA 17201
T: 800-345-1329

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America SDS GHS Rev. 7 (U.S., Can., Mex.)