



SF Ice Machine Cleaner

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)
Issue date: 2/18/2026 Supersedes: 7/23/2018 Version: 2.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : SF Ice Machine Cleaner
Product code : IMC025301, IMC025308, IMC025316

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

No additional information available

1.4. Supplier's details

Distributor

Trane U.S. INC.

Manufacturer

North American Research Corporation
519 Huffines Blvd., Lewisville, TX 75056
P.O. Box 1318, Lewisville, TX 75067
USA
T 972-492-1800, 800-527-7520 - F 972-394-6755
Info@narcochem.com - www.narcochem.com

1.5. Emergency phone number

Emergency number : For Chemical Emergency Call Infotrac 24hr/day 7days/week
Within USA and Canada: 1-800-535-5053
Outside USA and Canada: 1-352-323-3500

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Corrosive to metals, Category 1	H290	May be corrosive to metals.
Skin corrosion/irritation, Category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
Full text of H statements : see section 16		

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US)	: Danger
Hazard statements (GHS US)	: H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage
Precautionary statements (GHS US)	: P234 - Keep only in original packaging. P260 - Do not breathe dusts or mists. P264 - Wash face, hands, any exposed skin thoroughly after handling. P280 - Wear eye and face protection, protective gloves, protective clothing. P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.

SF Ice Machine Cleaner

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep 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, a doctor.
P321 - Specific treatment (see section 4 of this SDS, supplemental first aid instruction on this label).
P363 - Take off immediately all contaminated clothing and wash it before reuse.
P390 - Absorb spillage to prevent material-damage.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

Other hazards which do not result in classification : Mix with water only. Do not mix with other chemicals. On contact with some metals, such as aluminum, tin, or zinc, corrosion may occur and generate highly flammable hydrogen gas.

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Phosphoric acid	CAS-No.: 7664-38-2	30 – 40
citric acid	CAS-No.: 77-92-9	1 – 5

If the specific chemical identity and/or exact percentage of an ingredient is not specified, the information has been withheld as a trade secret.
Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Immediately call a poison center or doctor/physician. Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after skin contact : Burns.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Burns.

SF Ice Machine Cleaner

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use extinguishing media appropriate for surrounding fire.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe mist, spray, vapors.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe mist, spray. For commercial and industrial use only by professionals trained in the field of HVACR. Do not spray on electrical connections. Wear personal protective equipment. Avoid contact with skin and eyes. Ensure good ventilation of the work station.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Keep out of reach of children. Store locked up. Keep container tightly closed. Store in original container. Store in a well-ventilated place. Protect container from physical damage. Tip: For storage on service truck, place container inside of plastic pail and immobilize pail.

SF Ice Machine Cleaner

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Phosphoric acid (7664-38-2)	
USA - ACGIH® - Threshold Limit Values	
Local name	Phosphoric acid
ACGIH® TLV® TWA	1 mg/m³
ACGIH® TLV® STEL	3 mg/m³
Remark (ACGIH®)	TLV® Basis: Eye, Skin & URT irr
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Phosphoric acid
OSHA PEL TWA	1 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	Phosphoric acid
Cal/OSHA PEL (OEL TWA)	1 mg/m³
Cal/OSHA STEL	3 mg/m³
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
USA - NIOSH - Occupational Exposure Limits	
Local name	Phosphoric acid
NIOSH REL 10h TWA	1 mg/m³
NIOSH REL (STEL)	3 mg/m³
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

- Appropriate engineering controls
- : Ensure good ventilation of the work station.
- Environmental exposure controls
- : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:
Protective gloves. Wear protective gloves
Eye protection:
Safety glasses. Wear eye protection
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment.

SF Ice Machine Cleaner

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: green
Odor	: odorless
Odor threshold	: No data available
pH	: 1
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: ≈ 260 °F
Flash point	: Not flammable.
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.11
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent. Strong bases. Sulfites. Metals. On contact with some metals, such as aluminum, tin, or zinc, corrosion may occur and generate highly flammable hydrogen gas.

SF Ice Machine Cleaner

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

citric acid (77-92-9)

LD50 oral rat	11700 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 7 day(s))
LD50 oral	5400 mg/kg body weight (Equivalent or similar to OECD 401, Mouse, Male / female, Experimental value, Oral, 10 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
ATE US (oral)	5400 mg/kg body weight

Phosphoric acid (7664-38-2)

LD50 oral rat	3500 mg/kg Source: ECHA
LD50 dermal rabbit	2740 mg/kg Source: ECHA
ATE US (oral)	3500 mg/kg body weight
ATE US (dermal)	2740 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns.
pH: 1

citric acid (77-92-9)

pH	1.8 (5 %, 25 °C)
----	------------------

Phosphoric acid (7664-38-2)

pH	0 – 0.5 (20 °C)
----	-----------------

Serious eye damage/irritation : Causes serious eye damage.
pH: 1

citric acid (77-92-9)

pH	1.8 (5 %, 25 °C)
----	------------------

Phosphoric acid (7664-38-2)

pH	0 – 0.5 (20 °C)
----	-----------------

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

citric acid (77-92-9)

STOT-single exposure	May cause respiratory irritation.
----------------------	-----------------------------------

STOT-repeated exposure : Not classified

SF Ice Machine Cleaner

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

citric acid (77-92-9)	
LOAEL (oral,rat,90 days)	8000 mg/kg body weight Animal: rat
NOAEL (oral,rat,90 days)	4000 mg/kg body weight Animal: rat

Aspiration hazard : Not classified

citric acid (77-92-9)	
Viscosity, kinematic	Not applicable (solid)

Symptoms/effects after skin contact : Burns.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Burns.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. Before neutralization, the product may represent a danger to aquatic organisms.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

citric acid (77-92-9)	
LC50 - Fish [1]	440 – 760 mg/l (Equivalent or similar to OECD 203, 48 h, Leuciscus idus, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Other aquatic organisms [1]	> 50 mg/l Test organisms (species): other aquatic crustacea:

Phosphoric acid (7664-38-2)	
LC50 - Fish [1]	75.1 mg/l Source: ECHA
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

12.2. Persistence and degradability

SF Ice Machine Cleaner	
Persistence and degradability	Rapidly degradable

citric acid (77-92-9)	
Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.42 g O ₂ /g substance
Chemical oxygen demand (COD)	0.728 g O ₂ /g substance
ThOD	0.686 g O ₂ /g substance

Phosphoric acid (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable.

SF Ice Machine Cleaner

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

12.3. Bioaccumulative potential

citric acid (77-92-9)

Partition coefficient n-octanol/water (Log Pow) : -1.8 – -1.55 (Experimental value)

Bioaccumulative potential : Not bioaccumulative.

Phosphoric acid (7664-38-2)

Bioaccumulative potential : No test data of component(s) available.

12.4. Mobility in soil

citric acid (77-92-9)

Surface tension : No data available in the literature

Organic Carbon Normalized Adsorption Coefficient (Log Koc) : 1 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

Ecology - soil : Highly mobile in soil.

Phosphoric acid (7664-38-2)

Ecology - soil : Highly mobile in soil.

12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14 Transport information

14.1. UN number

UN-No. (DOT) : UN1805

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : UN1805, PHOSPHORIC ACID SOLUTION, 8, III (LIMITED QUANTITY)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 8 (LTD QTY)

Hazard labels (DOT) : 8, LTD QTY



14.4. Packing group

Packing group (DOT) : III

SF Ice Machine Cleaner

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
UN-No. (DOT) : UN1805
DOT Packaging Exceptions (49 CFR 173.xxx) : 154

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Phosphoric acid (7664-38-2)	
CERCLA RQ	5000 lb

15.2. International regulations

CANADA

citric acid (77-92-9)
Listed on the Canadian DSL (Domestic Substances List)

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

EU-Regulations

No additional information available

National regulations

citric acid (77-92-9)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Phosphoric acid (7664-38-2)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SF Ice Machine Cleaner

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

Component	State or local regulations
Phosphoric acid(7664-38-2)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)
Issue date : 2/18/2026

Full text of hazard classes and H-statements	
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

Safety Data Sheet (SDS), USA

NOTICE: This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all federal, state, provincial, and local laws and regulations.