SAFETY DATA SHEET

WORKFORCE Ni-Safe Ice Machine Cleaner **Revision Date** 2/1/2016

SECTION – 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME **WORKFORCE Ni-Safe Ice Machine Cleaner** **ITEM** **WF9206662LQ WF9201216LQ**

PRODUCT USE Ice Machine Scale Remover

COMPANY NAME Magnus Chemical
3680 W Royal Lane, Suite# 155A
Irving, TX 75063

Office (855) 962-4687
Fax
Web

24 HOUR EMERGENCY TELEPHONE NUMBER **CHEMTREC (800) 424-9300 CCN848380**

SECTION – 2 HAZARDS INFORMATION

Physical Hazards CORROSIVE TO METALS-Category 1

Health Hazards EYES-Category 1; SKIN-Category 1C

Corrosive to Metals
Eye Damage
Skin Corrosion/Burns

Danger

May be corrosive to metals
Causes severe skin burns and eye damage
May be harmful if swallowed, Do not get in eyes, on skin, or clothing, and avoid inhalation of mist, Do not smoke, eat or drink while using, Use proper Safety Equipment, safety glasses, or goggles, rubber gloves, and protective clothing, Wash thoroughly after handling, Avoid release into the environment

SECTION – 3 COMPOSITION INFORMATION

(Exact percentage of the listed chemicals of composition has been withheld as a trade secret)

CHEMICAL NAME	COMMON NAME AND SYNONYMS	CAS #	IMPURITIES	PERCENT
Phosphoric Acid	Monophosphoric Acid, Orthophosphoric Acid	7664-38-2		20 - 26%
Citric Acid		77-92-9		>4%
Surfactant				1%

SECTION – 4 FIRST AID MEASURES

EYE CONTACT Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids, Remove contact lenses if present and easy to do without injury to the eye and continue rinsing, Obtain immediate medical attention, preferably from an ophthalmologist or Emergency Room

SKIN CONTACT Immediately wash contaminated skin with a nonabrasive soap and plenty of water for at least 15 minutes, Remove contaminated shoes or clothing and wash before reuse, If irritation occurs or persists obtain medical attention

INHALATION Move person to fresh air, if they have problem breathing, show signs of overexposure or feel unwell obtain medical attention

INGESTION DO NOT INDUCE VOMITING. If person is fully conscious give one to two glasses of water to dilute and obtain immediate medical attention. If vomiting occurs, keep head below hips to prevent aspiration into the lungs

Aspiration Hazard Not applicable

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes Causes serious eye irritation, redness, burning sensation, pain, corrosive burns, or possible eye damage

Skin Causes serious skin irritation, itching, redness, burning, or possible corrosive burns

Inhalation Spray mist may cause mild irritation, to respiratory tract

Ingestion May be harmful if swallowed, May cause corrosive burns, of the mouth, throat, esophagus, and gastrointestinal tract

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes Causes serious eye damage, severe pain, severe corrosive burns, corneal injury, lesions, partial or complete blindness

Skin Causes serious skin damage, inflammation, burning, deep ulcerations, or corrosive burns

Inhalation Spray mist may cause irritation, to mucus membranes or respiratory tract

Ingestion May be harmful if swallowed, Causes corrosive burns, of the mouth, throat, esophagus, stomach, and gastrointestinal tract, Symptoms may include, nausea, vomiting, abdominal pain

SECTION – 5 FIRE FIGHTING MEASURES

Extinguishing Media Not flammable: Use extinguishing media for surrounding fire

Hazardous Decomposition Burning or thermal decomposition can produce, phosphorus oxides, carbon monoxide, carbon dioxide, and other toxic fumes

Reactive With Reactive with, strong oxidizing agents, strong reducing agents, strong bases, alkaline earth metals, nitrates

Explosion Hazards Not applicable

Static Discharge Not applicable

Mechanical Impact Not applicable

Protective Equipment Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear

SECTION – 6 ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Warn personnel of spill, Stop spill or release only if it can be done safely
Personal Precautions	Avoid slipping on spilled product, Keep unprotected personnel from entering the hazard area
Protective Equipment	Safety Glasses, Gloves, Chemical Apron and Rubber Boots
Containment	Use rags, towels, absorbent socks or pads to prevent spill from spreading, Prevent spill from entering the environment
Clean Up Procedures	Small Spills: Use wet vacuum or mop and wringer to pick up spilled material then mop area with clean water Large Spills: Absorb spill with inert material, place in a chemical waste container, mop area with clean water
Disposal	Dispose of material in accordance with all State and Federal Guidelines and Regulations

SECTION – 7 HANDLING AND STORAGE

Handling	Keep away from incompatible materials, Use appropriate safety equipment, Do not smoke, eat or drink while using, Wash thoroughly after handling, Avoid release to the environment, Triple rinse container before discarding
Storage	KEEP OUT OF REACH OF CHILDREN, Keep container closed when not in use, Store in a cool dry place away from incompatible materials, Keep from freezing
Incompatible Materials	Incompatible with, strong oxidizing agents, strong reducing agents, strong bases, alkaline earth metals, nitrates

SECTION – 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

CHEMICAL NAME	ACGIH (TWA 8)	ACGIH (STEL)	OSHA PEL (TWA 8)	OSHA (CEIL)	Significant Exposure
Phosphoric Acid	1 mg/m³	3 mg/m³	1 mg/m³	3 mg/m³	ED,SD,RT
Citric Acid	None Established				

PERSONAL PROTECTIVE EQUIPMENT

Chemical Safety Glasses, Goggles or Face Shield

Impervious Chemical Gloves

Impervious Protective Clothing

Eye Wash (Recommended)

Ventilation

General Ventilation

HMIS HAZARD RATINGS

Health	**3**
Flammability	**0**
Reactivity	**1**
Personal Protection	**C**

SECTION – 9 PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	> 93.3ºC (200ºF) - TAG Closed Cup	**Specific Gravity / Density**	1.10
Flammable Limits	ND	**pH (± 0.3)**	< 1.0
Auto-Ignition Temp.	ND	**Viscosity**	ND
Physical State	Liquid	**Freeze Point**	~ 0ºC (32ºF)
Appearance	Clear	**Boiling Point**	~ 100ºC (212ºF)
Odor	Mild	**Vapor Density (air=1)**	ND
Odor Threshold	ND	**Vapor Pressure (mm Hg)**	ND
Solubility	100%	**Evaporation Rate (nBuAc=1)**	ND
Volatiles	< 87%	**Partition Coefficient**	ND
VOC	0%	**Molecular Weight (g/mol)**	~ 34.3
LVP-VOC	0%	**Decomposition Temperature**	ND

SECTION – 10 STABILITY AND REACTIVITY

Reactivity (Specific Test Data)	No specific test data related to reactivity available for this product or its ingredients
Chemical Stability	Stable when stored above 4.4ºC (40ºF) and below 49ºC (120ºF)
Hazardous Polymerization	Will not occur
Conditions To Avoid	Incompatible materials
Incompatible Materials	Incompatible with, strong oxidizing agents, strong reducing agents, strong bases, alkaline earth metals, nitrates
Thermal Decomposition	Burning or thermal decomposition can produce, phosphorus oxides, carbon monoxide, carbon dioxide, and other toxic fumes

SECTION – 11 TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE

Eyes (Yes), Skin (Yes), Inhalation (Yes "Mist"), Ingestion (Yes)

ACUTE SYMPTOMS OF SINGLE OVEREXPOSURE

Eyes	Causes serious eye irritation, redness, burning sensation, pain, corrosive burns, or possible eye damage
Skin	Causes serious skin irritation, itching, redness, burning, or possible corrosive burns
Inhalation	Spray mist may cause mild irritation, to respiratory tract
Ingestion	May be harmful if swallowed, May cause corrosive burns, of the mouth, throat, esophagus, and gastrointestinal tract

CHRONIC SYMPTOMS OF PROLONGED OR REPEATED OVEREXPOSURE

Eyes	Causes serious eye damage, severe pain, severe corrosive burns, corneal injury, lesions, partial or complete blindness
Skin	Causes serious skin damage, inflammation, burning, deep ulcerations, or corrosive burns
Inhalation	Spray mist may cause irritation, to mucus membranes or respiratory tract
Ingestion	May be harmful if swallowed, Causes corrosive burns, of the mouth, throat, esophagus, stomach, and gastrointestinal tract, Symptoms may include, nausea, vomiting, abdominal pain

Acute Tox Calculated **Oral:** 5,661 mg/kg **Dermal:** 8,556 mg/kg **Inhaled:** > 50.0 mg/L

Acute Tox Category Not applicable (Oral >5000 mg/kg), Not applicable (Dermal > 5000 mg/kg), Not applicable (Inhaled >12.5 mg/L) Dust or Mist

Additional Info

Target Organs Mucous Membranes, Eyes (Lens or cornea), Skin

Medical Conditions Preexisting, eye, skin, respiratory, disorders may be aggravated by exposure to this product

Notes to Physician In case of ingestion, gastric lavage with activated charcoal can be used promptly to prevent absorption

CARCINOGENIC – This product contains concentrations above 0.1% of the following:

CHEMICAL NAME	NTP	ACGIH	IARC	GHS Category
None Listed	NA	NA	NA	NA

MUTAGENIC AND REPRODUCTIVE EFFECTS – This product contains concentrations above 0.1% of the following:

CHEMICAL NAME	Germ Cell Mutagenicity	Toxic to Reproduction
None Listed	NA	NA

COMPONENTS ACUTE TOXICITY

CHEMICAL NAME	Type	Form	Subject	Result Value	Exposure Time	GHS Category
Phosphoric Acid	LD50	Oral	Rat	1,530 mg/kg		4 (>300, ≤2000 mg/kg)
	LC50	Inhaled		No data listed		
	LD50	Dermal	Rabbit	2,740 mg/kg		(>2000 mg/kg)
Citric Acid	LD50	Oral	Rat	5,400 mg/kg		(>2000 mg/kg)
	LD50	Dermal	Rat	>2,000 mg/kg		(>2000 mg/kg)

SECTION – 12 ECOLOGICAL INFORMATION

CHEMICAL NAME	Type	Subject	Subject Latin	Result Value	Exposure Time	GHS Category
Phosphoric Acid	LC50	Mosquito Fish	(Gambusia affinis)	138 mg/L	96 Hours	3 (>10, ≤100 mg/L)
Citric Acid	LD50	Bluegill	(Lepomis macrochirus)	220 mg/L	96 Hours	4 (>100 mg/L)
	LC50	Water Flea	(Daphnia magna)	767.5 mg/L	48 Hours	4 (>100 mg/L)

Presistence And Degradability Phosphates may persist in the environment

Bioaccumulative Potential No data available

Mobility In Soil This material is a partially mobile liquid

Other Adverse Effects May be harmful to aquatic organisms due to pH shift

SECTION – 13 DISPOSAL CONSIDERATIONS

DO NOT DUMP INTO ANY STORM SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER
Dispose of any waste in accordance with all State and Federal Guidelines and Regulations

ENVIRONMENTAL FATE

Under RCRA rules, it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste.

CONTAINER DISPOSAL - Triple rinse empty container then offer for recycling. If not available, puncture and dispose in a sanitary landfill.

SECTION – 14 TRANSPORT INFORMATION

DOT CLASSIFICATION

UN Number	Proper Shipping Name	
Ltd Qty	"Limited Quantity"	"Inner packaging not over 5.0 Liters (1.3 gallons)"

Hazard Class	Packing Group	Label Codes	Reportable Quantity (lbs)	Response	Marine Pollutant	Hazard Label	Secondary
None	None	None	None	154	No		

Additional Info: Shipping information for: (Pints, Quarts and Gallons)

SECTION – 15 REGULATORY INFORMATION

TSCA

CHEMICAL NAME	Sec 8(b) Inventory	Sec 8(d) Health And Safety	Sec 4(a) Chemical Test Rules	Sec 12(b) Export Notification
Phosphoric Acid	Yes	Yes		

REPORTABLE QUANTITIES

	Extremely Hazardous		Reportable Quantity	Emission Reporting		
CHEMICAL NAME	EPCRA TPQ Sec 302	EPCRA RQ Sec 304	CERCLA RQ Sec 103	TRI Sec 313	RCRA Code	RMP TQ Sec 112r
Phosphoric Acid			5000			

SARA

	Section 311	Section 311 / 312 Hazards				
CHEMICAL NAME	Hazardous Chemical	Acute	Chronic	Flammable	Pressure	Reactive
Phosphoric Acid	Yes	Yes	Yes			
Citric Acid	Yes	Yes				

RIGHT TO KNOW

	STATE												
CHEMICAL NAME	CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI	WI
Phosphoric Acid	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	
Citric Acid						Yes		Yes					

CALIFORNIA

		WARNING! This product contains chemicals known to the state of California to cause:			
CHEMICAL NAME	CAS #	Birth Defects	Reproductive Harm	Carcinogen	Developmental
None Listed					

CLEAN AIR WATER ACTS

		Clean Air Acts			Clean Water Acts		
CHEMICAL NAME	CAS #	HAP	Ozone Class 1	Ozone Class 2	HS	PP	TP
None Listed							

INTERNATIONAL REGULATIONS – The components of this product are listed on the chemical inventories of the following countries:

CHEMICAL NAME	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Phosphoric Acid	Yes	Yes	Yes	Yes	Yes	Yes

WHMIS Classification

CHEMICAL NAME	DSL	Class	Description
Phosphoric Acid	Yes	E	Corrosive Material

SECTION – 16 OTHER INFORMATION

SDS	LEGEND DESCRIPTION
ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstracts Service Registry
CEIL	Ceiling Limit (15 minutes)
CERCL	Comprehensive Environmental Response, Compensation, and Liability Act
CI	Cochlear Impairment
CNS	Central Nervous System
EC50	Concentration of a chemical that gives half-maximal response
EPA	Environmental Protection Agency
Eye	(EI = Irritation) (ED = Damage) (EV = Visual Impairment)
FBG	Full Bunker Gear
GHS	Globally Harmonized System
HAP	California Hazardous air pollutant Clean Air Act
HMIS-A	Safety Glasses
HMIS-B	Safety glasses, gloves
HMIS-C	Safety glasses, gloves, chemical apron
HMIS-D	Face shield, gloves, chemical apron
HMIS-E	Safety glasses, gloves, dust respirator
HMIS-F	Safety glasses, gloves, chemical apron, dust respirator
HMIS-G	Safety glasses, gloves, vapor respirator
HMIS-H	Splash goggles, gloves, chemical apron, vapor respirator
HMIS-I	Safety glasses, gloves, dust and vapor respirator
HMIS-J	Splash goggles, gloves, chemical apron, dust and vapor respirator
HMIS-K	Air line hood or mask, gloves, full chemical suit, boots
HMIS-X	Ask Supervisor
HS	California Hazardous Substance under the Clean Water Act
KD	Kidney Damage (nephropathy)
LC50	A concentration that is lethal to 50% of a given species in a given time
LD50	Dose that is lethal to 50% of a given species by a given route of exposure
LEL	Lower Explosive Limit
LD	Liver Damage
NA	Not Applicable
ND	Not Determined
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NE	Not Established
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit (OSHA)
PNS	Peripheral Nervous System
PP	California Priority Pollutant under the Clean Water Act
REL	Recommended exposure limit (NIOSH)
RT	Upper Respiratory Tract
Skin	(SI = Irritation) (SD = Damage) (SA = Absorption) (SS = Sensitizer)
SARA	Superfund Amendments and Reauthorization Act
STEL	Short Term Exposure Limit (15 minutes)
TC Lo	Lowest concentration that is toxic to a given species in a given time
TD Lo	Lowest dose that is toxic to a given species
TLV	Threshold Limit Value (ACGIH)
TP	California Toxic Pollutant under the Clean Water Act
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average (8 hours)
UEL	Upper Explosive Limit

Stars & Stripes Chemical Co

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