SECTION I - IDENTIFICATION

PRODUCT NAME: Nickel Guard

PRODUCT CODE: 6662

PRODUCT USE: Ice machine cleaner

COMPANY NAME: QuestVapco Corporation

COMPANY ADDRESS: PO Box 624 Brenham, TX 77834

COMPANY PHONE: 1-800-231-0454 **EMERGENCY PHONE:** 800-255-3924

SECTION II – HAZARDS IDENTIFICATION

CLASSIFICATION: Skin Corrosion: Category 1C

Eye Damage: Category 1 Corrosive to Metals

HAZARD STATEMENT(S): DANGER: Causes Severe skin burns and eye damage. May be corrosive to metals.

This product contains the following percentage of chemicals of unknown toxicity: 2%

PRECAUTIONARY STATEMENTS: Do not breathe mists. Wash hands thoroughly after handling. Wear protective gloves and eye protection. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents and container in accordance with local, state, and national regulations. Keep only in original container. Absorb spillage to prevent material damage. Store in a corrosive resistant container with a resistant inner liner.



SYMBOL:

HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTCAS NUMBERPERCENTPhosphoric Acid7664-38-440-70%Citric Acid, Anhydrous77-92-93-7%

SECTION IV - FIRST AID MEASURES

EYES: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

INGESTION: If swallowed: Rinse mouth. Do NOT induce vomiting. Get medical advice or attention.

INHALATION: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.

SKIN: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

ACUTE HEALTH HAZARDS: Causes severe burns.

CHRONIC HEALTH HAZARDS: Skin disorders, drying and irritation of the skin.

NOTE TO PHYSICIAN: The absence of visible signs or symptoms of burns does not reliably exclude the presence of actual tissue damage.

SECTION V - FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Use appropriate media for surrounding fire.

UNSUITABLE EXTINGUISHING MEDIA: N/A

SPECIAL FIRE FIGHTING PROCEDURES: Wear NIOSH approved Self Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Non-combustible. Water spray may be used to keep fire exposed containers cool. **HAZARDOUS COMBUSTION PRODUCTS:**

SECTION VI – ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Refer to section VIII for proper Personal Protective Equipment.

SPILL: Absorb with non-combustible material like vermiculite, sand or earth and rinse with small amount of soapy water. Do not allow to drain into sewers or storm drains. Dispose of in accordance with local, state and federal regulations.

WASTE DISPOSAL: Dispose of in accordance with federal, state, and local regulations. Do not reuse container and recycle or place in trash collection. Drums and pails should be offered for recycling.

RCRA STATUS: Product should be fully characterized prior to disposal (40 CFR 261).

SECTION VII - HANDLING AND STORAGE

HANDLING AND STORAGE: Store in a cool, dry area away from extremes of temperature. Keep container tightly sealed when not in use. Store locked up.

OTHER PRECAUTIONS:

INCOMPATIBILITY: Strong alkalis, strong oxidizing agents.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Phosphoric Acid	1 mg/m3	1 mg/m3
Citric Acid, Anhydrous	Not Established	Not Established

ENGINEERING CONTROLS / VENTILATION: Provide adequate ventilation to keep vapor concentration below TLV. **RESPIRATORY PROTECTION:** Wear NIOSH/MSHA approved respiratory protection if exposure limits are exceeded.

PERSONAL PROTECTIVE EQUIPMENT: Safety glasses and chemical resistant gloves **ADDITIONAL MEASURES:** Wash hands and clothing in contact with product after use.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Turbid, Red Liquid

ODOR: Acid odor

ODOR THRESHOLD: N/D **BOILING POINT:** N/D

FREEZING POINT: $< 32^{\circ}F (0^{\circ}C)$

FLAMMABILITY: Not considered a flammable liquid by OSHA (29CFR 1910.1200)

FLASH POINT: N/D

AUTOIGNITION TEMPERATURE: N/D LOWER FLAMMABILITY LIMIT: N/D UPPER FLAMMABILITY LIMIT: N/D

VAPOR PRESSURE (mm Hg): 23.8 mmHg @ 77°F (25°C)

VAPOR DENSITY (AIR=1): 1 **EVAPORATION RATE:** < 0.8 (Slow)

SPECIFIC GRAVITY (H2O=1): 1.43 @ 77°F (25°C)

pH: <1

SOLIDS (%): N/D

SOLUBILITY IN WATER: 100%

PARTITION COEFFICIENT: n-OCTANOL/WATER (Kow): N/D

VOLATILITY INCLUDING WATER (%): 25% VOLATILE ORGANIC COMPOUNDS (VOC): 0%

DIELECTRIC STRENGTH (Volts): N/A **DECOMPOSITION TEMPERATURE:** N/D

VISCOSITY: N/D

SECTION X – STABILITY AND REACTIVITY DATA

REACTIVITY: Chemically active metals and bases.

CHEMICAL STABILITY: Stable

Safety Data Sheet

CONDITIONS TO AVOID: Chlorine liberating material. Do not mix with bases, ammonia or other cleaning compounds.

INCOMPATIBILITY: Strong alkalis, strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCT: Oxides of Carbon and Acid mist.

POSSIBLE HAZARDOUS REACTIONS: None Known

SECTION XI – TOXICOLOGICAL INFORMATION

 $\textbf{TOXICOLOGICAL INFORMATION: Phosphoric Acid } (7664-38-4) \ LD_{50} \ (Oral, \ Rat) \ 4,400 \ mg/kg; \ LD_{50} \ (Dermal, \ Rabbit) > 3,160 \ mg/kg; \ LD_{50} \ (Dermal, \$

mg/kg

ROUTES OF ENTRY: Eyes, Ingestion, Inhalation, Skin

EYES: Causes severe burns, stinging, redness, tearing, swelling, and may cause corneal damage, blindness. Burning may not be

immediately painful or visible.

INGESTION: Causes gastrointestinal irritation, nausea, vomiting, abdominal cramps. **INHALATION:** Causes irritation to the respiratory tract, coughing, shortness of breath.

SKIN: Causes burns to all living tissue.

MEDICAL CONDITION AGGRAVATED: Pre-existing disorders of the skin, respiratory system, and eyes will be aggravated by over

exposure.

ACUTE HEALTH HAZARDS: Causes severe burns.

CHRONIC HEALTH HAZARDS: Skin disorders, drying and irritation of the skin.

CARCINOGENICITY: OSHA: No ACGIH: No NTP: No IARC: No OTHER: No

SECTION XII - ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Not Established **BIODEGRADABILITY:** This product is biodegradable.

BIOACCUMULATION: This product is not expected to bioaccumulate.

SOIL MOBILITY: This product is mobile in soil. **OTHER ECOLOGICAL HAZARDS:** None Known

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Dispose of in accordance with federal, state, and local regulations. Do not reuse container and recycle or place in trash collection. Drums and pails should be offered for recycling.

RCRA STATUS: Product should be fully characterized prior to disposal (40 CFR 261).

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: Phosphoric acid solution

HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 1805 PACKAGING GROUP: III

AIR SHIPMENT

PROPER SHIPPING NAME: Phosphoric acid solution

HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 1805

SHIPPING BY WATER: VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Phosphoric acid solution

HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 1805

ENVIRONMENTAL HAZARDS WATER: N/A

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All Chemicals are listed or exempt.

Safety Data Sheet

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Phosphoric Acid (7664-38-4)

Reportable Quantity = 5,000 lbs

SARA 311/312 HAZARD CATEGORIES: Acute Health, Chronic Health. **SARA 313 REPORTABLE INGREDIENTS:** Phosphoric Acid (7664-38-2)

STATE REGULATIONS: California Proposition 65: None

INTERNATIONAL REGULATIONS: All components are listed or exempted.

NFPA HEALTH: 3
NFPA FLAMMABILITY: 0
NFPA REACTIVITY: 0
HMIS FLAMMABILITY: 0
HMIS REACTIVITY: 0

NFPA OTHER: None HMIS PROTECTION: B

SECTION XVI - ADDTIONAL INFORMATION

PREPARATION BY: Jonathon Jarvis **DATE PREPARED:** 11/22/2013 **REVISION DATE:** 11/22/2013

N/A = Not Applicable; N/D = Not Determined

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