



your partner in food safety

Issue Date: 31-Oct-2018

Revision Date: 20-Nov-2018

Version 1

## 1. IDENTIFICATION

### Product identifier

Product Name Ala Quat

### Other means of identification

SDS # BIR-052

Product Code I00095

UN/ID No UN1903

### Recommended use of the chemical and restrictions on use

Recommended Use An acidified quaternary ammonium sanitizer approved for use in dairy and food processing plants.

### Details of the supplier of the safety data sheet

#### Supplier Address

Birko Corporation  
9152 Yosemite Street  
Henderson, CO 80640-8027  
www.birkocorp.com

### Emergency telephone number

Company Phone Number Phone: 303-289-1090 or 1-800-525-0476

Fax: 303-289-1190

Emergency Telephone Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear, colorless to pink liquid

**Physical state** Liquid

**Odor** Slight sour

### Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

### Signal Word

Danger

### Hazard statements

Harmful if inhaled

Causes severe skin burns and eye damage



**Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dusts or mists  
 Wash face, hands and any exposed skin thoroughly after handling

**Precautionary Statements - Response**

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  
 Immediately call a POISON CENTER or doctor  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ 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 SWALLOWED: Rinse mouth. Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards**

Toxic to aquatic life with long lasting effects

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS No	Weight-%
Phosphoric Acid	7664-38-2	25-35
Alkyl dimethyl benzyl ammonium chloride (C12-16)	68424-85-1	1-5
Decyldimethyloctylammonium Chloride	32426-11-2	1-5
N,N-Dioctyl-N, N-dimethylammonium Chloride	5538-94-3	1-5
Ethyl Alcohol	64-17-5	1-5
Didecyldimethylammonium chloride	7173-51-5	1-5

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret. \*\*

**4. FIRST AID MEASURES****Description of first aid measures**

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
<b>Skin Contact</b>	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a poison center or doctor/physician.
<b>Inhalation</b>	Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor/physician.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting.

**Most important symptoms and effects, both acute and delayed**

---

<b>Symptoms</b>	Causes severe skin burns and eye damage. Harmful if inhaled.
-----------------	--

**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
---------------------------	------------------------

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray (fog). Carbon dioxide (CO2). Foam blanket.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Acid reacts with most metals to release hydrogen gas which can form explosive mixtures with the air.

**Hazardous combustion products** Carbon dioxide (CO2). Carbon monoxide. Nitrogen oxides (NOx). Propylene Oxides (POx).

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Wear protective gloves/protective clothing and eye/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dusts or mists. Wash face, hands and any exposed skin thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials** Alkali metals. Strong alkalis. Anionic surfactants. Metal salts. Oxidizers. Acids.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric Acid 7664-38-2	STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup> (vacated) STEL: 3 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Ethyl Alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m <sup>3</sup>	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

### Appropriate engineering controls

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Wear eye/face protection. Refer to 29 CFR 1910.133 for eye and face protection regulations.

**Skin and Body Protection** Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

**Respiratory Protection** Refer to 29 CFR 1910.134 for respiratory protection requirements.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid		
<b>Appearance</b>	Clear, colorless to pink liquid	<b>Odor</b>	Slight sour
<b>Color</b>	Clear, colorless to pink	<b>Odor Threshold</b>	Not determined
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
pH	2.0 (1% solution)		
<b>Melting point / freezing point</b>	Not determined		
<b>Boiling point / boiling range</b>	Not determined		
<b>Flash point</b>	Not determined		
<b>Evaporation Rate</b>	Not determined		
<b>Flammability (Solid, Gas)</b>	Liquid - not applicable		
<b>Flammability Limit in Air</b>			
<b>Upper flammability or explosive limits</b>	Not determined		
<b>Lower flammability or explosive limits</b>	Not determined		
<b>Vapor Pressure</b>	Not determined		
<b>Vapor Density</b>	Not determined		
<b>Relative Density</b>	1.15		
<b>Water Solubility</b>	100%		
<b>Solubility in other solvents</b>	Not determined		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>Partition Coefficient</b>	Not determined		
<b>Autoignition temperature</b>	Not determined		
<b>Decomposition temperature</b>	Not determined		
<b>Kinematic viscosity</b>	Not determined		
<b>Dynamic Viscosity</b>	Not determined		
<b>Explosive Properties</b>	Not determined		

<b>Oxidizing Properties</b>	Not determined
-----------------------------	----------------

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible materials

Alkali metals. Strong alkalis. Anionic surfactants. Metal salts. Oxidizers. Acids.

### Hazardous decomposition products

Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Propylene Oxides (PO<sub>x</sub>). Acid reacts with most metals to release hydrogen gas which can form explosive mixtures with air.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### **Product Information**

<b>Eye Contact</b>	Causes severe eye damage.
<b>Skin Contact</b>	Causes severe skin burns.
<b>Inhalation</b>	Do not inhale.
<b>Ingestion</b>	Do not ingest.

### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Phosphoric Acid 7664-38-2	= 1530 mg/kg (Rat)	= 2740 mg/kg (Rabbit)	> 850 mg/m <sup>3</sup> (Rat) 1 h
Alkyl dimethyl benzyl ammonium chloride (C12-16) 68424-85-1	= 426 mg/kg (Rat)	-	-
Alcohols, C9-11 ethoxylated 68439-46-3	= 1378 mg/kg (Rat) = 1400 mg/kg (Rat)	> 2 g/kg (Rabbit)	-
Didecyldimethylammonium chloride 7173-51-5	= 84 mg/kg (Rat)	-	-
Ethyl Alcohol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	Please see section 4 of this SDS for symptoms.
-----------------	--

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Carcinogenicity</b>	Ethanol has been shown to be carcinogenic in long-term studies only when consumed as an alcoholic beverage.			
------------------------	---	--	--	--

Chemical name	ACGIH	IARC	NTP	OSHA
Ethyl Alcohol 64-17-5	A3	Group 1	Known	X

**Legend****ACGIH (American Conference of Governmental Industrial Hygienists)**

A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

**NTP (National Toxicology Program)**

Known - Known Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document.

Oral LD50	2,322.66 mg/kg
Dermal LD50	7,157.10 mg/kg
ATEmix (inhalation-dust/mist)	1.45 mg/L

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic life with long lasting effects.

**Component Information**

Chemical name	Algae/aquatic plants	Fish	Crustacea
Phosphoric Acid 7664-38-2		3 - 3.5: 96 h Gambusia affinis mg/L LC50	4.6: 12 h Daphnia magna mg/L EC50
Ethyl Alcohol 64-17-5		100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static	10800: 24 h Daphnia magna mg/L EC50 2: 48 h Daphnia magna mg/L EC50 Static 9268 - 14221: 48 h Daphnia magna mg/L LC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

There is no data for this product.

**Mobility**

Chemical name	Partition coefficient
Ethyl Alcohol 64-17-5	-0.32

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Phosphoric Acid 7664-38-2	Corrosive
Ethyl Alcohol 64-17-5	Toxic Ignitable

#### **14. TRANSPORT INFORMATION**

##### Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

##### DOT

**UN/ID No** UN1903  
**Proper Shipping Name** Disinfectant, liquid, corrosive, n.o.s. (Quaternary Ammonium Compounds)  
**Hazard class** 8  
**Packing Group** II

##### IATA

**UN number** UN1903  
**Proper Shipping Name** Disinfectant, liquid, corrosive, n.o.s. (Quaternary Ammonium Compounds)  
**Transport hazard class(es)** 8  
**Packing Group** II

##### IMDG

**UN number** UN1903  
**Proper Shipping Name** Disinfectant, liquid, corrosive, n.o.s. (Quaternary Ammonium Compounds)  
**Transport hazard class(es)** 8  
**Packing Group** II  
**Marine Pollutant** Yes

#### **15. REGULATORY INFORMATION**

##### International Inventories

Chemical name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Phosphoric Acid	X	X	X	X	X	X	X	X
Alkyl dimethyl benzyl ammonium chloride (C12-16)	X	X	X	X	X	X	X	X
Decyldimethyloctylammonium Chloride	X	X	X		X	X	X	
Alcohols, C9-11 ethoxylated	X	X			X	X	X	X
Didecyldimethylammonium chloride	X	X	X	X	X	X	X	X
N,N-Dioctyl-N, N-dimethylammonium Chloride	X	X	X		X	X	X	X
Ethyl Alcohol	X	X	X	X	X	X	X	X

##### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****CERCLA**

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phosphoric Acid 7664-38-2	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric Acid	5000 lb			X

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Ethyl Alcohol - 64-17-5	Carcinogen Developmental

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Phosphoric Acid 7664-38-2	X	X	X
Ethyl Alcohol 64-17-5	X	X	X

**16. OTHER INFORMATION**

<u>NFPA</u>	Health Hazards 2	Flammability 0	Instability 1	Special Hazards Not determined
<u>HMIS</u>	Health Hazards 2	Flammability 0	Physical hazards 1	Personal Protection J

Issue Date: 31-Oct-2018  
 Revision Date: 20-Nov-2018  
 Revision Note: New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet