

SAFETY DATA SHEET

Issue Date 12-Jul-2012

Revision Date 24-May-2015

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Code 16760
Product Name Lemon Quat

Other means of identification

Recommended use of the chemical and restrictions on use

Use only for the purpose on the product label.

Details of the supplier of the safety data sheet

Manufacturer / Manufactured For

ChemMark of Houston
6531 Petropark Dr.
Houston, TX 77041
Phone: (832) 467-1233

Emergency telephone number

24 Hour Emergency Phone Number 1-800-535-5053

2. HAZARDS IDENTIFICATION

Classification

Label elements

Emergency Overview

Appearance Yellow	Physical state Liquid	Odor Lemon
--------------------------	------------------------------	-------------------

Precautionary Statements - Response

Specific Treatment (See Section 4 on the SDS).

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/attention.

IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Drink plenty of water.

Precautionary Statements - Storage

Store in a cool, dry place away from strong oxidizing agents. Keep locked up and out of the reach of children.

Precautionary Statements - Disposal

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

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity 0.35% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health.

4. FIRST AID MEASURES

First aid measures

Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If irritation persists, call a physician.
Inhalation	If mists/vapors are formed or irritation occurs, leave area and do not return until mists/vapors have dissipated. If irritation persists, see a physician.
Ingestion	Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. If irritation persists, see a physician.

Most important symptoms and effects, both acute and delayed

Symptoms	The product causes irritation of eyes, skin and mucous membranes. May cause sensitization by skin contact.
-----------------	--

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
---------------------------	------------------------

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No Information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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	Ensure adequate ventilation, especially in confined areas.
-----------------------------	--

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 cleaning up	Contain spill. Clean up with inert material and place in a properly labeled container.
--------------------------------	--

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

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

Incompatible materials Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethanol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protection Rubber gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators or air purifying respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance Yellow
Odor Lemon
Odor threshold No Information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	10.0 - 11.0	
Specific Gravity	1.009	
Viscosity	No Information available	
Melting point/freezing point	No Information available	
Boiling point / boiling range	> 212 / ° F Degrees	
Flash point	N/A	
Evaporation rate	< 1	(butyl acetate = 1)
Flammability (solid, gas)	No Information available	

Upper flammability limit:	N/A
Lower flammability limit:	N/A
Vapor pressure	N/A
Vapor density	N/A
Water solubility	Complete
Partition Coefficient (n-octanol/water)	No Information available
Autoignition temperature	No Information available
Decomposition temperature	No Information available

Other Information

Density Lbs/Gal	No Information available
VOC Content (%)	0.17

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

No special precautions beyond standard safe industrial practices.

Incompatible materials

Strong oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon and nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Nonylphenol Polyethylene Glycol Ether 127087-87-0	= 1310 mg/kg (Rat)	-	-
Alkyl dimethyl benzyl ammonium chloride 68391-01-5	= 500 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Alkyl dimethyl ethylbenzyl ammonium chloride 85409-23-0	= 250 mg/kg (Rat)	= 3400 mg/kg (Rabbit)	= 86 mg/L (Rat) 4 h
Tetrasodium EDTA 64-02-8	= 10 g/kg (Rat) = 1658 mg/kg (Rat)	-	-
Ethanol 64-17-5	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat) 4 h
Trisodium nitrilotriacetate 5064-31-3	= 920 mg/kg (Rat)	-	> 5 mg/L (Rat) 4 h

Amines, C12-18, alkyldimethyl 68391-04-8	= 750 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Ethylenediaminetriacetic Acid, trisodium salt (ED3Ana3) 19019-43-3	= 1780 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms No Information available.

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

Sensitization No Information available.
Germ cell mutagenicity No Information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

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

Reproductive toxicity No Information available.
STOT - single exposure No Information available.
STOT - repeated exposure No Information available.
Chronic toxicity Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.
Aspiration hazard No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0.35% of the mixture consists of ingredient(s) of unknown toxicity.
The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

5.34% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Tetrasodium EDTA 64-02-8	1.01: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	41: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 59.8: 96 h <i>Pimephales promelas</i> mg/L LC50 static	610: 24 h <i>Daphnia magna</i> mg/L EC50
Ethanol 64-17-5	-	12.0 - 16.0: 96 h <i>Oncorhynchus mykiss</i> mL/L LC50 static 100: 96 h <i>Pimephales promelas</i> mg/L LC50 static 13400 - 15100: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through	9268 - 14221: 48 h <i>Daphnia magna</i> mg/L LC50 2: 48 h <i>Daphnia magna</i> mg/L EC50 Static 10800: 24 h <i>Daphnia magna</i> mg/L EC50

Trisodium nitrilotriacetate 5064-31-3	560 - 1000: 96 h Chlorella vulgaris mg/L EC50	93 - 170: 96 h Pimephales promelas mg/L LC50 flow-through 560 - 1000: 96 h Oryzias latipes mg/L LC50 semi-static 72 - 133: 96 h Oncorhynchus mykiss mg/L LC50 static 560 - 1000: 96 h Poecilia reticulata mg/L LC50 semi-static 560 - 1000: 96 h Poecilia reticulata mg/L LC50 114: 96 h Pimephales promelas mg/L LC50 175 - 225: 96 h Lepomis macrochirus mg/L LC50 static 252: 96 h Lepomis macrochirus mg/L LC50 470: 96 h Pimephales promelas mg/L LC50 static 560 - 1000: 96 h Oryzias latipes mg/L LC50	560 - 1000: 48 h Daphnia magna mg/L LC50
--	--	--	---

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Other adverse effects

No Information available.

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

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under 49 CFR, IATA and IMDG to assure regulatory compliance.

DOT

Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

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

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.

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains chemicals known to the state of California to cause cancer, or birth defects or other reproductive harm. Ethanol is only considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage.

Chemical Name	California Proposition 65
Ethanol - 64-17-5	Carcinogen Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethanol 64-17-5	X	X	X
Trisodium nitrilotriacetate 5064-31-3	-	X	-
Sodium Hydroxide 1310-73-2	X	X	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

HMIS Health hazards 1 Flammability 0 Physical hazards 0 Personal protection X

Legend

N/A - Not Applicable

N/E - Not Established

N/D - Not Determined

N/K - Not Known

Issue Date 12-Jul-2012

Revision Date 24-May-2015

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