according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date 28.12.2015 Revision: 28.12.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
- Trade name: Lemon APD v.2
- Article number: 100494
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

· Application of the substance / the mixture:

All-purpose cleaner

Disinfectant

- · Uses advised against: No further relevant information available.
- 1.3 Details of the supplier of the Safety Data Sheet
- Manufacturer/Supplier:

Theochem Laboratories 7373 Rowlett Park Drive Tampa, PL 33610

Phone: 813-237-6463



ChemTel Inc.

+1 (800)255-3924, +1 (813)248-0585



SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Eye Irrit. 2 H319 Causes serious eye irritation.

- 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the Globally Harmonized System within the United States (GHS).

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard-determining components of labelling:

tetrasodium ethylenediaminetetraacetate

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection.

(Cont'd. on page 2)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA **GHS**

Printing date 28.12.2015 Revision: 28.12.2015

Trade name: Lemon APD v.2

(Cont'd. from page 1)

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

NFPA ratings (scale 0 - 4)



Health = 1 Fire = 0Reactivity = 0

HMIS-ratings (scale 0 - 4)



1 Health = 1 Fire = 0

2.3 Other hazards

There are no other hazards not otherwise classified that have been identified.

0 % of the mixture consists of component(s) of unknown toxicity.

- Results of PBT and vPvB assessment
- **PBT**: Not applicable. · **vPvB**: Not applicable.

SECTION 3: Composition/information on ingredients

3 2 Mixtures

Dangerous components:		
CAS: 64-02-8 EINECS: 200-573-9 Index number: 607-428-00-2	tetrasodium ethylenediaminetetraacetate Eye Dam. 1, H318 Acute Tox. 4, H302; Acute Tox. 4, H332	< 3,0%
CAS: 85409-23-0 EINECS: 287-090-7	Alkyl dimethyl ethyl benzyl ammonium chloride Skin Corr. 1B, H314 Aquatic Acute 1, H400 Acute Tox. 4, H302	< 1,0%
CAS: 68391-01-5 EINECS: 269-919-4	quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides Skin Corr. 1B, H314 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute Tox. 4, H302	<1%

· Additional information:

For the wording of the listed Hazard Statements refer to section 16.

For the listed ingredient(s), the identity and exact percentages are being withheld as a trade secret.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.

(Cont'd. on page 3)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date 28.12.2015 Revision: 28.12.2015

Trade name: Lemon APD v.2

(Cont'd. from page 2)

After skin contact:

Immediately rinse with water.

If skin irritation continues, consult a doctor.

After eye contact:

Protect unharmed eye.

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

- 4.2 Most important symptoms and effects, both acute and delayed Irritant to eyes.
- Hazards No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · For safety reasons unsuitable extinguishing agents: None.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- 5.3 Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

· Additional information No further relevant information available.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation

Particular danger of slipping on leaked/spilled product.

Wear protective clothing.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Clean the affected area carefully; suitable cleaners are:

Warm water

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date 28.12.2015 Revision: 28.12.2015

Trade name: Lemon APD v.2

(Cont'd, from page 3)

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

- Information about fire and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

- Information about storage in one common storage facility: Store away from oxidising agents.
- · Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see section 7.
- 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- 8.2 Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Respiratory protection:

Not required under normal conditions of use.

For spills, respiratory protection may be advisable.

Protection of hands:

Not required under normal conditions of use.

Wear protective gloves to handle contents of damaged or leaking units.

· Eye protection:



Safety glasses

Body protection:

Not required under normal conditions of use.

Protection may be required for spills.

Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date 28.12.2015 Revision: 28.12.2015

Trade name: Lemon APD v.2

(Cont'd. from page 4)

SECTION 9: Physical and che	mical properties			
, , ,				
9.1 Information on basic physical ar General Information	nd chemical properties			
Appearance:				
Form:	Liquid			
Colour:	Yellow			
· Odour:	Fruit-like			
· Odour threshold:	Not determined.			
· pH-value at 20 °C (68 °F):	9,0 - 11,0			
· Change in condition				
Melting point/Melting range:	Not determined.			
Boiling point/Boiling range:	Not determined.			
· Flash point:	Not applicable.			
· Flammability (solid, gaseous):	Not applicable.			
· Auto/Self-ignition temperature:	Not determined.			
Decomposition temperature:	Not determined.			
Self-igniting:	Product is not self-igniting.			
Danger of explosion:	Product does not present an explosion hazard.			
· Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			
Vapour pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)			
Density at 20 °C (68 °F):	1,01 g/cm³ (8,428 lbs/gal)			
Relative density	Not determined.			
· Vapour density	Not determined.			
Evaporation rate	< 1 (Butyl Acetate = 1)			
· Solubility in / Miscibility with				
water:	Fully miscible.			
Partition coefficient (n-octanol/wate	er): Not determined.			
· Viscosity:				
Dynamic:	Not determined.			
Kinematic:	Not determined.			
· 9.2 Other information	No further relevant information available.			

SECTION 10: Stability and reactivity

• **10.1 Reactivity** No further relevant information available.

(Cont'd, on page 6)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date 28.12.2015 Revision: 28.12.2015

Trade name: Lemon APD v.2

(Cont'd. from page 5)

- 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions

Toxic fumes may be released if heated above the decomposition point.

Reacts with strong oxidising agents.

Reacts with strong acids.

- **10.4 Conditions to avoid** Excessive heat.
- · 10.5 Incompatible materials: Oxidizers, strong bases, strong acids
- · 10.6 Hazardous decomposition products:

Hydrogen chloride (HCI)

Chlorine

Carbon monoxide

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification: None.
- · Primary irritant effect:
- · Skin corrosion/irritation Slight irritant effect on skin and mucous membranes.
- Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Carcinogenic categories
- · IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
- · Aquatic toxicity: The product contains materials that are harmful to the environment.
- 12.2 Persistence and degradability A part of the components is biodegradable.

(Cont'd. on page 7)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date 28.12.2015 Revision: 28.12.2015

Trade name: Lemon APD v.2

(Cont'd. from page 6)

- 12.3 Bioaccumulative potential Does not accumulate in organisms.
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- General notes:

This statement was deduced from the properties of the single components.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of larger amounts in accordance with Local Authority requirements.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water only.

14.1 UN-Number		
DOT, ADR, IMDG, IATA	Not Regulated	
14.2 UN proper shipping name		
DOT, ADR, IMDG, IATA	Not Regulated	
14.3 Transport hazard class(es)		
DOT, ADR, IMDG, IATA		
Class	Not Regulated	
14.4 Packing group		
DOT, ADR, IMDG, IATA	Not Regulated	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date 28.12.2015 Revision: 28.12.2015

Trade name: Lemon APD v.2

(Cont'd. from page 7)

14.7 Transport in bulk according to Annex II of

Marpol and the IBC Code Not applicable.

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA
- Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California):
- Chemicals known to cause cancer:

64-17-5 ethanol

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

Ethanol - listing refers specifically to alcoholic beverage consumption and is not applicable for product.

64-17-5 ethanol

- · Carcinogenic Categories
- EPA (Environmental Protection Agency)

85409-23-0 Alkyl dimethyl ethyl benzyl ammonium chloride

Registered

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

EPA Product Registration: 10324-167-9367.

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

KEEP OUT OF REACH OF CHILDREN

WARNING

FIRST AID: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by (Cont'd. on page 9)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date 28.12.2015 Revision: 28.12.2015

Trade name: Lemon APD v.2

(Cont'd. from page 8)

a poison control center or doctor. Do not give anything by mouth to an unconscious person. IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING. KEEP OUT OF REACH OF CHILDREN.

Causes substantial but temporary eye injury. Harmful if swallowed, inhaled, or absorbed through the skin. Do not get in eyes or on clothing. Avoid contact with skin. Wear goggles or face shield when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

ENVIRONMENTAL HAZARD

This product is toxic to fish.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame. Do not mix with oxidizers, anionic soaps and detergents.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

CONTAINER DISPOSAL/PESTICIDE STORAGE: Non-refillable container. Store only in original container. Do not reuse empty container. Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep this product under locked storage sufficient to make it inaccessible to children or persons unfamiliar with its proper use. Triple rinse as follows: Fill container ¼ full with water and reclose the container. Agitate vigorously and dispose of rinsate. Repeat two more times. Wrap container and put in trash or offer for recycling if available.

RESIDUE REMOVAL INSTRUCTIONS: Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Fill the container ¼ full with water and recap. Shake for 10 seconds. Follow Pesticide Disposal instructions for rinsate disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

- Canada
- · Canadian Domestic Substances List (DSL)

All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients are listed.

Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients are listed.

(Cont'd. on page 10)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date 28.12.2015 Revision: 28.12.2015

Trade name: Lemon APD v.2

(Cont'd. from page 9)

- · Other regulations, limitations and prohibitive regulations
- Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Sources

(Cont'd, on page 11)

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date 28.12.2015 Revision: 28.12.2015

Trade name: Lemon APD v.2

(Cont'd. from page 10)

Website, European Chemicals Agency (http://http://echa.europa.eu/)

Website, US EPA Substance Registry Services (http://http://ofmpub.epa.gov/sor_internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (https://www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by: ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com