



### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : AdvancedGel UC

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Washing and cleaning products (including solvent based products)  
Air Conditioning Universal Cleaner

#### 1.3. Supplier

Aspen Pump Inc  
Building C, 14600 Brown Road, Tomball  
TX 77377, USA

[sales-us@aspenspumps.com](mailto:sales-us@aspenspumps.com)

T: +1 346 236 1270

#### 1.4. Emergency telephone number

Emergency number : 1-800-424-9300 (CHEMTREC)

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Skin corrosion/irritation Category 1B Causes severe skin burns and eye damage

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger  
Hazard statements (GHS US) : Causes severe skin burns and eye damage  
Precautionary statements (GHS US) : If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Read label before use.  
Do not breathe fume, vapors.  
Wash hands, forearms and face thoroughly after handling.  
Wear eye protection, protective gloves.  
If swallowed: rinse mouth. Do NOT induce vomiting.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Wash contaminated clothing before reuse.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : The product does not meet the PBT and vPvB classification criteria.

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

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### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
phosphoric acid	(CAS-No.) 7664-38-2	20 – 60	Skin Corr. 1B, H314
Citric Acid	(CAS-No.) 77-92-9	1 – 20	Eye Irrit. 2, H319 Aquatic Acute 3, H402
Poly(oxy-1,2-ethanediy), alphasodecyl-omega-hydroxy	(CAS-No.) 61827-42-7	1 – 10	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
2-aminoethanol, ethanolamine	(CAS-No.) 141-43-5	1 – 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314 Aquatic Acute 2, H401

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately. Immediately call a poison center or doctor/physician.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately. Immediately call a poison center or doctor/physician.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

### 4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Reactivity in case of fire	: Toxic fumes may be released.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands, forearms and face thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases and strong oxidising agents.

Incompatible materials : Sources of ignition. Direct sunlight.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>AdvancedGel UC</b>	
No additional information available	
<b>Citric Acid (77-92-9)</b>	
No additional information available	
<b>phosphoric acid (7664-38-2)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Phosphoric acid
ACGIH TWA (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
ACGIH STEL (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Remark (ACGIH)	URT, eye, & skin irr
Regulatory reference	ACGIH 2020
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Phosphoric acid
OSHA PEL (TWA) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

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### 2-aminoethanol, ethanolamine (141-43-5)

#### USA - ACGIH - Occupational Exposure Limits

Local name	Ethanolamine
ACGIH TWA (ppm)	3 ppm
ACGIH STEL (ppm)	6 ppm
Remark (ACGIH)	Eye & skin irr
Regulatory reference	ACGIH 2020

#### USA - OSHA - Occupational Exposure Limits

Local name	Ethanolamine
OSHA PEL (TWA) (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
OSHA PEL (TWA) (ppm)	3 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

### Poly(oxy-1,2-ethanediyl), alphasodecyl-omega-hydroxy (61827-42-7)

No additional information available

## 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

## 8.3. Individual protection measures/Personal protective equipment

### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Protective gloves. Wear protective gloves.

Type	Material	Permeation	Thickness (mm)	Permeation
Disposable gloves	Polyvinylchloride (PVC)	3 (> 60 minutes)		2 (< 1.5)

#### Eye protection:

Chemical goggles or face shield. Safety glasses

Type	Use	Characteristics
Safety glasses with side shields, Safety goggles		

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask

### Personal protective equipment symbol(s):



### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Gel  
Color : Green  
Odor : Barely perceptible odour

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Odor threshold	: No data available
pH	: 3
Melting point	: 0 °C□
Freezing point	: 0 °C□
Boiling point	: 100 °C□
Flash point	: > 93 °C□
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable. Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.5 g/ml
Solubility	: Soluble in water
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. Thermal decomposition generates : Corrosive vapors.

### 10.2. Chemical stability

Stable under normal conditions. Not established.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong bases and strong oxidising agents.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates : Corrosive vapors.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Citric Acid (77-92-9)	
ATE US (oral)	11700 mg/kg body weight
phosphoric acid (7664-38-2)	
ATE US (oral)	1530 mg/kg body weight
ATE US (dermal)	2740 mg/kg body weight
2-aminoethanol, ethanolamine (141-43-5)	
LD50 oral rat	1720 mg/kg
LD50 dermal rat	1500 mg/kg

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<b>2-aminoethanol, ethanolamine (141-43-5)</b>	
ATE US (oral)	700 mg/kg body weight
ATE US (dermal)	1500 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

<b>Poly(oxy-1,2-ethanediyl), alphasodecyl-omega-hydroxy (61827-42-7)</b>	
ATE US (oral)	500 mg/kg body weight

Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Assumed to cause serious eye damage
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Harmful to aquatic life.
Ecology - water	: Harmful to aquatic life.

<b>Citric Acid (77-92-9)</b>	
LC50 fish 1	> 100 mg/l
EC50 other aquatic organisms 1	85 mg/l waterflea

<b>phosphoric acid (7664-38-2)</b>	
EC50 other aquatic organisms 1	> 100 mg/l waterflea
EC50 other aquatic organisms 2	> 100 mg/l

<b>2-aminoethanol, ethanolamine (141-43-5)</b>	
LC50 fish 1	349 mg/l
EC50 other aquatic organisms 1	65 mg/l waterflea
EC50 other aquatic organisms 2	2.5 mg/l

### 12.2. Persistence and degradability

<b>AdvancedGel UC</b>	
Persistence and degradability	Biodegradable

<b>Citric Acid (77-92-9)</b>	
Persistence and degradability	Biodegradable.

### 12.3. Bioaccumulative potential

<b>AdvancedGel UC</b>	
Bioaccumulative potential	No bioaccumulative potential

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<b>Citric Acid (77-92-9)</b>	
Partition coefficient n-octanol/water (Log Pow)	-1.72
Bioaccumulative potential	Not expected to be bioaccumulative.
<b>phosphoric acid (7664-38-2)</b>	
Partition coefficient n-octanol/water (Log Pow)	-0.77
<b>2-aminoethanol, ethanolamine (141-43-5)</b>	
Partition coefficient n-octanol/water (Log Pow)	-1.31

### 12.4. Mobility in soil

Readily absorbed into soil. Soluble in water.

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN1760 Corrosive liquids, n.o.s. (2-aminoethanol, ethanolamine; phosphoric acid), 8, II  
UN-No.(DOT) : UN1760  
Proper Shipping Name (DOT) : Corrosive liquids, n.o.s.  
2-aminoethanol, ethanolamine ; phosphoric acid  
Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136  
Packing group (DOT) : II - Medium Danger  
Hazard labels (DOT) : 8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202  
DOT Packaging Bulk (49 CFR 173.xxx) : 242

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DOT Special Provisions (49 CFR 172.102)	: B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively. TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 30 L
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters"
Emergency Response Guide (ERG) Number	: 154
Other information	: No supplementary information available.

### Transportation of Dangerous Goods

Not applicable

### Transport by sea

Transport document description (IMDG)	: UN 1760 CORROSIVE LIQUID, N.O.S. (2-aminoethanol; ethanolamine ; phosphoric acid), 8, II
UN-No. (IMDG)	: 1760
Proper Shipping Name (IMDG)	: CORROSIVE LIQUID, N.O.S.
Class (IMDG)	: 8 - Corrosive substances
Packing group (IMDG)	: II - substances presenting medium danger
Limited quantities (IMDG)	: 1 L

### Air transport

Transport document description (IATA)	: UN 1760 Corrosive liquid, n.o.s. (2-aminoethanol, ethanolamine ; phosphoric acid), 8, II
UN-No. (IATA)	: 1760
Proper Shipping Name (IATA)	: Corrosive liquid, n.o.s.
Class (IATA)	: 8 - Corrosives
Packing group (IATA)	: II - Medium Danger

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### Citric Acid (77-92-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### phosphoric acid (7664-38-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ	5000 lb
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### 2-aminoethanol, ethanolamine (141-43-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### Poly(oxy-1,2-ethanediyl), alphasodecyl-omega-hydroxy (61827-42-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

\*All components of this product are listed on the TSCA inventory and comply with the inventory requirements.

## 15.2. International regulations

### CANADA

No additional information available

### EU-Regulations

No additional information available

### National regulations

No additional information available

## 15.3. US State regulations

Component	State or local regulations
phosphoric acid(7664-38-2)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
2-aminoethanol, ethanolamine(141-43-5)	U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

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Other information : None.

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*