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

1.1. Product identifier

Product form	:	Mixture
Product name	:	ADVANCEDGEL UC
UFI	:	QCJR-7YN0-P733-3P6K
REACH registration No	:	Exempt - MIXTURE
Product code	:	350
Synonyms	:	Z3

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category	:	Professional use
Industrial/Professional use spec	:	For professional use only
Use of the substance/mixture	:	Surfactants Cleaning/washing agents and additives

1.2.2. Uses advised against

Restrictions on use	:	Use as laboratory reagent

1.3. Details of the supplier of the safety data sheet

Manufacturer
Aspen Pumps Group
Guardian House, Stroudley Road
RG24 8NL Basingstoke
United Kingdom
T +44 (0) 1256 460 300
sales@advancedengineering.co.uk - www.aspenpumps.com

Distributor
Aspen Pumps Deutschland GmbH
Tichauer Weg 30
40231 Düsseldorf
Germany
T +49211467979 (Ext. 1)
info@aspenpumps.de - www.aspenpumps.de

Distributor
Aspen Pumps France (Siege Social) SAS
353 Allée des Vergers
76360 Barentin
France
T +905338686779
ventes@aspenpumps.com - https://www.aspenpumps.com/fr

Distributor
Aspen Pumps Asia Pacific Pty Ltd
8 Waddikee Road
SA 5160 Lonsdale
Australia
T 5160 (08) 8186 4666
sales@aspenpumps.com.au - https://aspenpumps.com.au/

1.4. Emergency telephone number

Emergency number : CHEMTREC (24hr) +44 (0) 1256 854318 (Multilingual)

Country	Organisation/Company	Address	Emergency number	Comment
Australia	NSW Poisons Information Centre The Children's Hospital at Westmead	Locked Bag 4001 NSW 2145	13 11 26	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1, Sub-Category 1A	H314
Serious eye damage/eye irritation, Category 1	H318

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage. Causes serious eye damage.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS05

Signal word (CLP) : Danger

Contains : Phosphoric acid

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) : P260 - Do not breathe dusts or mists.
P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

Other hazards which do not result in classification : None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Phosphoric acid substance with national workplace exposure limit(s) (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, AL, IS, NO, MK, RS, CH, TR); substance with a Community workplace exposure limit	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6	≥ 30 – < 50	Skin Corr. 1B, H314
citric acid substance with national workplace exposure limit(s) (CZ, DE, CH)	CAS-No.: 77-92-9 EC-No.: 201-069-1 EC Index-No.: 607-750-00-3	≥ 10 – < 30	Eye Irrit. 2, H319 STOT SE 3, H335
POLY(OXY-1,2-ETHANEDIYL), ALPHA-ISODECYL-OMEGA-HYDROXY	CAS-No.: 61827-42-7	≥ 1 – < 3	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Dam. 1, H318

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits**
Phosphoric acid	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6	(10 ≤C < 25) Skin Irrit. 2, H315 (10 ≤C < 25) Eye Irrit. 2, H319 (25 ≤C ≤ 100) Skin Corr. 1B, H314

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.

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.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes.

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/vapours/spray.

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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth.
Methods for cleaning up : Take up liquid spill into absorbent material.
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.

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/vapours/spray. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat. Ensure adequate ventilation, especially in confined areas.
Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.
Incompatible products : Strong bases. Oxidizing agent.
Incompatible materials : Direct sunlight. Sources of ignition.
Maximum storage period : ≥ 5 year
Storage temperature : < 55 °C
Storage area : Store away from heat.
Special rules on packaging : Keep only in original container. Store in a closed container.
Packaging materials : Keep only in the original container in a cool,well-ventilated place away from combustible materials.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Phosphoric acid (7664-38-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Orthophosphoric acid
IOEL TWA	1 mg/m³
IOEL STEL	≤ 2 mg/m³
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

Exposure limit values for the other components

2-aminoethanol (141-43-5)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	2-Aminoethanol	
IOEL TWA [ppm]	1 ppm	
IOEL STEL	7.6 mg/m³	
IOEL STEL [ppm]	3 ppm	
Remark	Skin	
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:
Protective clothing. Protective goggles. Insulated gloves. Avoid all unnecessary exposure.

Personal protective equipment symbol(s):

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Green.
Appearance	:	Clear to cloudy.
Odour	:	Barely perceptible odour.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	< 0
Boiling point	:	> 100 °C
Flammability	:	Not applicable
Explosive properties	:	No data available.
Explosive limits	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available

Flash point	:	> 93 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	< 3
pH solution	:	≤ 3
Viscosity, kinematic	:	Not available
Viscosity, dynamic	:	> 3000 cP
Solubility	:	Soluble. Water: > 55 g/l
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	≥ 1.4
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : < 1 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

citric acid (77-92-9)	
LD50 oral	5400 mg/kg bodyweight Animal: mouse, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:, 95% CL: 4500 - 6400
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Causes severe skin burns.
pH: < 3

Phosphoric acid (7664-38-2)	
pH	< 3

Serious eye damage/irritation : Classification procedure not required, because the substance or the mixture is by definition not an organic peroxide
pH: < 3

Phosphoric acid (7664-38-2)	
pH	< 3

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

citric acid (77-92-9)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

citric acid (77-92-9)	
LOAEL (oral, rat, 90 days)	8000 mg/kg bodyweight Animal: rat
NOAEL (oral, rat, 90 days)	4000 mg/kg bodyweight Animal: rat

Aspiration hazard : Not classified

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : Corrosivity: based upon skin corrosion test data, classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

Not rapidly degradable

Phosphoric acid (7664-38-2)	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

12.2. Persistence and degradability

ADVANCEDGEL UC	
Persistence and degradability	100 % biodegradation.

12.3. Bioaccumulative potential

ADVANCEDGEL UC	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

ADVANCEDGEL UC
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3264	UN 3264	UN 3264	UN 3264	UN 3264
14.2. UN proper shipping name				
CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric Acid;)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric Acid;)	Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric Acid;)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric Acid;)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric Acid;)
Transport document description				
UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric Acid;), 8, II, (E)	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric Acid;), 8, II	UN 3264 Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric Acid;), 8, II	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric Acid;), 8, II	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric Acid;), 8, II
14.3. Transport hazard class(es)				
8	8	8	8	8
14.4. Packing group				
II	II	II	II	II

ADR	IMDG	IATA	ADN	RID
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	C1
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	1l
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02
Mixed packing provisions (ADR)	:	MP15
Portable tank and bulk container instructions (ADR)	:	T11
Portable tank and bulk container special provisions (ADR)	:	TP2, TP27
Tank code (ADR)	:	L4BN
Tank special provisions (ADR)	:	TU42
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	2
Hazard identification number (Kemler No.)	:	80
Orange plates	:	
Tunnel restriction code (ADR)	:	E

Transport by sea

Special provisions (IMDG)	:	274
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T11
Tank special provisions (IMDG)	:	TP2, TP27
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	B
Stowage and handling (IMDG)	:	SW2
Segregation (IMDG)	:	SGG1, SG36, SG49
Properties and observations (IMDG)	:	Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y840
PCA limited quantity max net quantity (IATA)	:	0.5L
PCA packing instructions (IATA)	:	851
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	855
CAO max net quantity (IATA)	:	30L
Special provisions (IATA)	:	A3, A803
ERG code (IATA)	:	8L

Inland waterway transport

Classification code (ADN)	:	C1
Special provisions (ADN)	:	274
Limited quantities (ADN)	:	1 L

Excepted quantities (ADN)	:	E2
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0

Rail transport

Classification code (RID)	:	C1
Special provisions (RID)	:	274
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001, IBC02
Mixed packing provisions (RID)	:	MP15
Portable tank and bulk container instructions (RID)	:	T11
Portable tank and bulk container special provisions (RID)	:	TP2, TP27
Tank codes for RID tanks (RID)	:	L4BN
Special provisions for RID tanks (RID)	:	TU42
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE6
Hazard identification number (RID)	:	80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : < 1 %

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4

Full text of H- and EUH-statements:	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

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.