



SAFETY DATA SHEET

Astonish Premium Edition Ultimate Limescale Remover

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

1.1. Product identifier

Product name	Astonish Premium Edition Ultimate Limescale Remover
Product number	694001
Internal identification	F1V1

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

Identified uses	Cleaning and Removing Limescale
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1.3. Details of the supplier of the safety data sheet

Supplier

The London Oil Refining Company Ltd
 Astonish House
 Unit 1 Premier Point
 Staithgate Lane
 Bradford, BD6 1DW
 UK
 + 44 1274 767440
 + 44 1274 726285
 www.astonishcleaners.com

Contact person	info@astonish.co.uk
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1.4. Emergency telephone number

Emergency telephone	(01274) 767440 (office hours only)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Eye Irrit. 2 - H319
Environmental hazards	Not Classified

2.2. Label elements

Pictogram



Signal word	Warning
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Hazard statements	H319 Causes serious eye irritation. EUH208 Contains ((Chloro)methylisothiazolinone & Methylisothiazolinone. May produce an allergic reaction.
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Precautionary statements	<p>P101 If medical advice is needed, have product container or label at hand.</p> <p>P102 Keep out of reach of children.</p> <p>P103 Read label before use.</p> <p>P264 Wash hands thoroughly after handling.</p> <p>P280 Wear eye and face protection.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p>
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Additional Labelling

Detergent labelling	< 5% non-ionic surfactants, < 5% perfumes, < 5% phosphonates, Contains Linalool, dl-Limonene (racemic), dl-Citronellol, reaction mass of: 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one, 2-methylisothiazol-3(2H)-one, 1,2-benzisothiazol-3(2H)-one
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2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Citric Acid Monohydrate	1-5%
CAS number: 5949-29-1	EC number: 201-069-1
Classification	Classification (67/548/EEC or 1999/45/EC)
Eye Irrit. 2 - H319	Xi; R36
Undecanol, branched and linear, ethoxylated (>5-15 EO)	1-5%
CAS number: 127036-24-2	EC number: 931-721-7
Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302 Eye Dam. 1 - H318	Xn; R22. Xi; R41
Butyl Diglycol	1-5%
CAS number: 112-34-5	EC number: 203-961-6
Classification	Classification (67/548/EEC or 1999/45/EC)
Eye Irrit. 2 - H319	Xi; R36
Etidronic Acid	<1%
CAS number: 2809-21-4	REACH registration number: 01-2119510391-53-0000
Classification	
Met. Corr. 1 - H290 Acute Tox. 4 - H302 Eye Dam. 1 - H318	

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Glycerol <1%	
CAS number: 56-81-5	EC number: 200-289-5
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC) NC Not Classified
2,2'-iminodiethanol <1%	
CAS number: 111-42-2	EC number: 203-868-0
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT RE 2 - H373	Classification (67/548/EEC or 1999/45/EC) Xn; R22, R48/22. Xi; R38, R41
Linalool <1%	
CAS number: 78-70-6	EC number: 201-134-4
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	Classification (67/548/EEC or 1999/45/EC) Xi; R36/38
dl-Limonene (racemic) <1%	
CAS number: 138-86-3	EC number: 205-341-0
M factor (Chronic) = 1	
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1B - H317 Asp. Tox. 1 - H304 Aquatic Chronic 1 - H410	Classification (67/548/EEC or 1999/45/EC) Xn; R65. Xi; R38. N; R50/53. R43, R10
dl-Citronellol <1%	
CAS number: 106-22-9	EC number: 203-375-0
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317	Classification (67/548/EEC or 1999/45/EC) Xi; R36/38. N; R51/53. R43

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((Chloro)methylisothiazolinone & Methyllisothiazolinone)		<1%
CAS number: 55965-84-9	EC number: 611-341-5	
M factor (Acute) = 10	M factor (Chronic) = 10	
Classification	Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 3 - H301	T; R23/24/25. C; R34. N; R50/53. R43	
Acute Tox. 3 - H311		
Acute Tox. 3 - H331		
Skin Corr. 1B - H314		
Skin Sens. 1A - H317		
Aquatic Acute 1 - H400		
Aquatic Chronic 1 - H410		
2-methylisothiazol-3(2H)-one		<1%
CAS number: 2682-20-4	EC number: 220-239-6	
M factor (Acute) = 1		
Classification	Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 3 - H301	T; R23. Xn; R22. C; R34. N; R50. R43	
Acute Tox. 3 - H311		
Acute Tox. 2 - H330		
Skin Corr. 1B - H314		
Skin Sens. 1 - H317		
STOT SE 3 - H335		
Aquatic Acute 1 - H400		
Aquatic Chronic 2 - H411		
1,2-benzisothiazol-3(2H)-one		<1%
CAS number: 2634-33-5	EC number: 220-120-9	
M factor (Acute) = 1		
Classification	Classification (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H302	Xn; R22. Xi; R38, R41. N; R50. R43	
Skin Irrit. 2 - H315		
Eye Dam. 1 - H318		
Skin Sens. 1 - H317		
Aquatic Acute 1 - H400		
Aquatic Chronic 2 - H411		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove exposure and give water to drink if mouth irritation experienced. Seek medical advice if recovery not rapid.
Ingestion	Drink water. If symptoms persist seek medical advice.
Skin contact	Rinse affected area with water.

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Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing.

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

Inhalation Possible mild irritation of breathing passage and possible mouth irritation.

Ingestion Possible mild stomach upset and mild soreness of mouth.

Skin contact Possible mild transient irritation of skin.

Eye contact Causes eye irritation.

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

Notes for the doctor No data available

Specific treatments No data available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use extinguisher suitable to cause of fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Product does not support combustion, minimal fire hazard. Minimal quantities of oxides of carbon may be produced.

5.3. Advice for firefighters

Protective actions during firefighting Use protection suitable to cause of fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Product is intended to be rinsed away to sewer after use. For bigger spillages non-household spillages prevent entry into sewer or drains.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb household spillages with e.g kitchen roll and dispose of in bin. Wipe affected area clean with a damp cloth.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Use as instructed on label. Avoid breathing spray. Point spray away from face. Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in ambient conditions. Keep out of the reach of children.

7.3. Specific end use(s)

Specific end use(s) Cleaning and Removing Limescale

SECTION 8: Exposure Controls/personal protection

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8.1. Control parameters

Occupational exposure limits

Butyl Diglycol

Long-term exposure limit (8-hour TWA): 10 ppm 67.5 mg/m³

Short-term exposure limit (15-minute): 15 ppm 101.2 mg/m³

Glycerol

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ mist

2,2'-iminodiethanol

Long-term exposure limit (8-hour TWA): WEL 13 mg/m³

Linalool

Long-term exposure limit (8-hour TWA): DNEL 2.5 mg/kg Dermal

Long-term exposure limit (8-hour TWA): DNEL 2.8 mg/m³ Inhalation

Long-term exposure limit (8-hour TWA): DNEL 15 mg/cm³ Dermal

Short-term exposure limit (15-minute): DNEL 15 mg/cm³ Dermal

WEL = Workplace Exposure Limit

Citric Acid Monohydrate (CAS: 5949-29-1)

PNEC

- Fresh water; 0.44 mg/l
- Sediment (Freshwater); 3.46 mg/kg
- Sediment (Marinewater); 34.6 mg/kg
- Marine water; 0.044 mg/l
- STP; >1000 mg/l
- Soil; 33.1 mg/kg

8.2. Exposure controls

Environmental exposure controls This product does not pose a hazard in normal use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Clear colourless liquid
Colour	Colourless.
Odour	Zesty Lemon/Lime
Odour threshold	Not known.
pH	pH (concentrated solution): 1.8 - 3.2
Melting point	Not known.
Initial boiling point and range	Not measured (>100°C)
Flash point	Not determined.
Evaporation rate	Not known.
Evaporation factor	Not known.
Flammability (solid, gas)	Does not ignite.
Upper/lower flammability or explosive limits	Does not ignite.
Other flammability	Not relevant.

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Vapour pressure	Not determined.
Vapour density	> 1 (Air=1)
Relative density	1.008 - 1.020 @ 20°C
Bulk density	Not relevant.
Solubility(ies)	Soluble in water
Partition coefficient	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature	Not available.
Viscosity	Not measured
Explosive properties	None
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not applicable.

9.2. Other information

Other information None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No reactivity hazards expected.

10.2. Chemical stability

Stability Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal conditions.

10.4. Conditions to avoid

Conditions to avoid None known.

10.5. Incompatible materials

Materials to avoid None known.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects This mixture has not been tested. Based on the available data of the ingredients the classification criteria are not met.

Acute toxicity - oral

ATE oral (mg/kg) 18,888.29

SECTION 12: Ecological Information

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12.1. Toxicity

Toxicity The mixture has not been tested. Based on the available data of the ingredients the classification criteria are not met.

12.2. Persistence and degradability

Persistence and degradability Contains detergents that satisfy the bio-degradation requirements of directive 648/2004/EC.

12.3. Bioaccumulative potential

Bioaccumulative potential Not available.

Partition coefficient Not known.

12.4. Mobility in soil

Mobility The components of the mixture are readily absorbed into soil and are mobile in water environment.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No data available.

12.6. Other adverse effects

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of according to local regulations. Avoid disposing into drainage systems and into the environment. Dispose of contaminated packaging in the same way as the product itself. Non-contaminated packages may be recycled.

SECTION 14: Transport information

General Not regulated.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not regulated.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

EU legislation This safety data sheet is compliant with EC Regulation 1907/2006 (REACH) as adapted by 453/2010, Directive 67/548/EEC and EC Regulation 1272/2008 (CLP).
Dangerous Preparations Directive 1999/45/EC.
Regulation (EC) No. 648/2004 of the European Parliament and of the Council of 31st March 2004 on detergents.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet ATE: Acute Toxicity Estimate.
CAS: Chemical Abstracts Service.
DNEL: Derived No Effect Level.
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
vPvB: Very Persistent and Very Bioaccumulative.

General information Note: The hazard statements below are explanations of phrases used in the SDS as abbreviations and DO NOT apply to the product. The statements applicable to the product are those identified in Section 2 only.

Revision comments This is first issue.

Issued by The London Oil Refining Company Ltd

Revision date 28/06/2017

Revision 1.1

SDS number 5207

Risk phrases in full R10 Flammable.
R22 Harmful if swallowed.
R23 Toxic by inhalation.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R34 Causes burns.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50 Very toxic to aquatic organisms.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.

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Hazard statements in full

H226 Flammable liquid and vapour.
H290 May be corrosive to metals.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
EUH208 Contains ((Chloro)methylisothiazolinone & Methylisothiazolinone. May produce an allergic reaction.