



## SAFETY DATA SHEET

### Astonish Germ Clear Disinfectant Super Concentrated

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

##### 1.1. Product identifier

**Product name** Astonish Germ Clear Disinfectant Super Concentrated  
**Product number** 922701  
**Internal identification** F11V3

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

**Identified uses** Cleaning hard surfaces around the home with antibacterial action.

##### 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  
(01274) 767440 (office hours only)  
[www.astonishcleaners.com](http://www.astonishcleaners.com)  
(01274) 726285

**Contact person** [info@astonish.co.uk](mailto:info@astonish.co.uk)

##### 1.4. Emergency telephone number

**Emergency telephone** (01274) 767440 (office hours only)

#### SECTION 2: Hazards identification

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

###### Classification (EC 1272/2008)

**Physical hazards** Not Classified  
**Health hazards** Skin Irrit. 2 - H315 Eye Irrit. 2 - H319  
**Environmental hazards** Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411

##### 2.2. Label elements

###### Pictogram



**Signal word** Warning

## Astonish Germ Clear Disinfectant Super Concentrated

<b>Hazard statements</b>	H315 Causes skin irritation. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects. EUH208 Contains Limonene. May produce an allergic reaction.
<b>Precautionary statements</b>	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P273 Avoid release to the environment. P280 Wear protective gloves, eye and face protection. P264 Wash skin thoroughly after handling. P302+P352 IF ON SKIN: Wash with plenty of water. 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. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
<b>Additional Labelling</b>	< 5% disinfectants
<b>Detergent labelling</b>	< 5% cationic surfactants, < 5% non-ionic surfactants, Contains Limonene

### 2.3. Other hazards

None

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>Quaternary ammonium compounds, benzyl (C12 - C16) alkyl dimethyl, chlorides</b>			<b>1-5%</b>
CAS number: 68424-85-1	EC number: 270-325-2		
M factor (Acute) = 10	M factor (Chronic) = 1		
<b>Classification</b> Met. Corr. 1 - H290 Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		<b>Classification (67/548/EEC or 1999/45/EC)</b> Xn; R22. C; R34. N; R50/53	
<b>Isopropanol</b>			<b>1-5%</b>
CAS number: 67-63-0	EC number: 200-661-7	REACH registration number: 01-2119457558-25-0000	
<b>Classification</b> Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336		<b>Classification (67/548/EEC or 1999/45/EC)</b> F; R11. Xi; R36. R67	

## Astonish Germ Clear Disinfectant Super Concentrated

<b>Terpineol</b>		<b>1-5%</b>
CAS number: 8000-41-7	EC number: 232-268-1	
<b>Classification</b> Skin Irrit. 2 - H315 Eye Irrit. 2 - H319	<b>Classification (67/548/EEC or 1999/45/EC)</b> Xi; R36/38	
<b>Cocamine Oxide</b>		<b>&lt;1%</b>
CAS number: 308062-28-4	EC number: 931-292-6	
M factor (Acute) = 1		
<b>Classification</b> Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411	<b>Classification (67/548/EEC or 1999/45/EC)</b> Xn; R22. Xi; R41, R38. N; R50, R51/53	
<b>Limonene</b>		<b>&lt;1%</b>
CAS number: 7705-14-8	EC number: 231-732-0	
M factor (Acute) = 1	M factor (Chronic) = 1	
<b>Classification</b> Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	<b>Classification (67/548/EEC or 1999/45/EC)</b> Xn; R65. Xi; R38. R52/53, R10, R43	

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

<b>Inhalation</b>	Remove exposure and give water to drink if mouth irritation experienced. Seek medical advice if recovery not rapid.
<b>Ingestion</b>	Drink water. If symptoms persist seek medical advice.
<b>Skin contact</b>	Rinse affected area with water. Remove contaminated clothing.
<b>Eye contact</b>	Rinse thoroughly with water for several minutes. If symptoms persist seek medical advice.

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

<b>Inhalation</b>	Possible mild irritation of breathing passage and possible mouth irritation.
<b>Ingestion</b>	Possible mild stomach upset and mild soreness of mouth.
<b>Skin contact</b>	Causes mild skin irritation.
<b>Eye contact</b>	Causes eye irritation.

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

<b>Notes for the doctor</b>	No data available
-----------------------------	-------------------

## Astonish Germ Clear Disinfectant Super Concentrated

**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

**Reference to other sections** None

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions** Use as instructed on label. Avoid contact with skin and 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 hard surfaces around the home providing antibacterial action.

### SECTION 8: Exposure Controls/personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

##### **Isopropanol**

Long-term exposure limit (8-hour TWA): EH40 WEL, WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): EH40 WEL 500 ppm 1,250 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

**Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate (CAS: 51981-21-6)**

## Astonish Germ Clear Disinfectant Super Concentrated

<b>DNEL</b>	Workers - Inhalation; Short term systemic effects: 55 mg/m <sup>3</sup> Workers - Inhalation; Short term local effects: 55 mg/m <sup>3</sup> Workers - Inhalation; Long term systemic effects: 7.3 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 15000 mg/kg/day Consumer - Inhalation; Long term systemic effects: 1.8 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 7500 mg/kg/day Consumer - Oral; Long term systemic effects: 1.5 mg/kg/day
-------------	--

### Cocamine Oxide (CAS: 308062-28-4)

<b>DNEL</b>	Workers - Dermal; systemic effects: 11 mg/kg/day Workers - Inhalation; systemic effects: 15.5 mg/m <sup>3</sup> Workers - Dermal; local effects: 0.27 % General population - Dermal; systemic effects: 5.5 mg/kg/day General population - Inhalation; systemic effects: 3.8 mg/m <sup>3</sup> General population - Oral; systemic effects: 0.44 mg/kg/day
-------------	--

<b>PNEC</b>	- Fresh water; 0.0335 mg/l - Marine water; 0.00335 mg/l - Intermittent release; 0.0335 mg/l - Sediment (Freshwater); 5.24 mg/kg - Sediment (Marinewater); 0.524 mg/kg - Soil; 1.02 mg/kg - STP; 24 mg/kg
-------------	--

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

<b>PNEC</b>	- 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 when following the usage instructions. Take care to avoid contact with skin and eyes. Gloves may be required for repeated or prolonged exposure.

## SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Clear green liquid
<b>Colour</b>	Green.
<b>Odour</b>	Pine
<b>Odour threshold</b>	Not known.
<b>pH</b>	pH (concentrated solution): 6.5 - 8.5
<b>Melting point</b>	Not known.
<b>Initial boiling point and range</b>	Not measured (>100°C)
<b>Flash point</b>	Not applicable.
<b>Evaporation rate</b>	Not known.

## Astonish Germ Clear Disinfectant Super Concentrated

Evaporation factor	Not known.
Flammability (solid, gas)	Does not ignite.
Upper/lower flammability or explosive limits	Does not ignite.
Other flammability	Not relevant.
Vapour pressure	Not available.
Vapour density	>1 (Air=1)
Relative density	0.975 - 1.005 @ 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 available.

### 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

## Astonish Germ Clear Disinfectant Super Concentrated

**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) 31,800.0

#### Quaternary ammonium compounds, benzyl (C12 - C16) alkyl dimethyl, chlorides

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 795.0

Species Rat

ATE oral (mg/kg) 795.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 1,560.0

Species Rat

#### Isopropanol

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 5,820.0

Species Rat

ATE oral (mg/kg) 5,820.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 12,800.0

Species Rabbit

ATE dermal (mg/kg) 12,800.0

## SECTION 12: Ecological Information

### 12.1. Toxicity

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

#### Quaternary ammonium compounds, benzyl (C12 - C16) alkyl dimethyl, chlorides

##### Acute aquatic toxicity

LE(C)<sub>50</sub> 0.01 < L(E)C<sub>50</sub> ≤ 0.1

M factor (Acute) 10

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 1.7 mg/l, *Onchorhynchus mykiss* (Rainbow trout)

Acute toxicity - aquatic invertebrates EC<sub>50</sub>, 48 hours: 0.03 mg/l, *Daphnia magna*

## Astonish Germ Clear Disinfectant Super Concentrated

<b>Acute toxicity - aquatic plants</b>	EC <sub>50</sub> , 96 hours: 0.06 mg/l, <i>Selenastrum capricornutum</i>
<b>Acute toxicity - microorganisms</b>	EC <sub>20</sub> , 0.5 hour: 10 mg/l, Activated sludge
<b><u>Chronic aquatic toxicity</u></b>	
<b>M factor (Chronic)</b>	1

### 12.2. Persistence and degradability

**Persistence and degradability** Contains detergents that satisfy the bio-degradation requirements of directive 648/2004/EC. Pine oil - complete in 28 days. OECD 301E-Readily biodegradable material modified screening test. OECD 302 C 0 Inherent biodegradability modified MITI test (no.2)

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No bio-accumulative potential noted for any component.

**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 determined.

## **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.



## Astonish Germ Clear Disinfectant Super Concentrated

### 14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

## **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.  
 Biocidal Products Regulation (528/2012/EC)

### 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.  
 LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.  
 LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).  
 PBT: Persistent, Bioaccumulative and Toxic substance.  
 PNEC: Predicted No Effect Concentration.  
 vPvB: Very Persistent and Very Bioaccumulative.  
 EC<sub>50</sub>: 50% of maximal Effective Concentration.

**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** Product name change.

**Issued by** The London Oil Refining Company Ltd

**Revision date** 18/05/2017

**Revision** 11.3

**Supersedes date** 02/12/2015

**SDS number** 4881

## Astonish Germ Clear Disinfectant Super Concentrated

### Risk phrases in full

R10 Flammable.  
R11 Highly flammable.  
R22 Harmful if swallowed.  
R34 Causes burns.  
R36 Irritating to eyes.  
R38 Irritating to skin.  
R41 Risk of serious damage to eyes.  
R43 May cause sensitisation by skin contact.  
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.  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R65 Harmful: may cause lung damage if swallowed.  
R67 Vapours may cause drowsiness and dizziness.

### Hazard statements in full

H225 Highly flammable liquid and vapour.  
H226 Flammable liquid and vapour.  
H290 May be corrosive to metals.  
H302 Harmful if swallowed.  
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.  
H336 May cause drowsiness or dizziness.  
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 Limonene. May produce an allergic reaction.