SAFETY DATA SHEET
Anti-fog Glass Cleaner

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

1.1. Product identifier
Product name
Anti-fog Glass Cleaner
Internal identification
F3V1

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses
Cleaning windows & glass providing an anti-fog effect.

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)
(01274) 726285
www.astonishcleaners.com

Contact person
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
Classifications
Physical hazards
Not Classified
Health hazards
Not Classified
Environmental hazards
Not Classified

2.2. Label elements
Hazard statements
NC Not Classified

Precautionary statements
P102 Keep out of reach of children.
P103 Read label before use.

Detergent labelling
Contains 1,2-benzisothiazol-3(2H)-one, 2-methylisothiazol-3(2H)-one

2.3. Other hazards
None

SECTION 3: Composition/Information on Ingredients

3.2. Mixtures

Anti-fog Glass Cleaner

<table>
<thead>
<tr>
<th>Isopropanol</th>
<th>5-10%</th>
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<tbody>
<tr>
<td>CAS number: 67-63-0</td>
<td></td>
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<tr>
<td>EC number: 200-661-7</td>
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<tr>
<td>REACH registration number: 01-2119457558-25-0000</td>
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</tbody>
</table>

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

Classification (67/548/EEC or 1999/45/EC)
F; R11. Xi; R36. R67

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.

Eye contact
Rinse thoroughly with water for several minutes. If symptoms persist seek medical advice.

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
Possible mild irritation, redness and soreness.

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.
Anti-fog Glass Cleaner

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 breathing spray. Point spray away from face.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions
Store in ambient conditions.

7.3. Specific end use(s)

Specific end use(s)
Cleaning windows & glass providing an anti-fog effect.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits
Isopropanol
Long-term exposure limit (8-hour TWA): WEL 400 999
Short-term exposure limit (15-minute): WEL 500 1250
WEL = Workplace Exposure Limit

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

DNEL
- Workers - Inhalation; Short term systemic effects: 55 mg/m³
- Workers - Inhalation; Short term local effects: 55 mg/m³
- Workers - Inhalation; Long term systemic effects: 7.3 mg/m³
- Workers - Dermal; Long term systemic effects: 15000 mg/kg/day
- Consumer - Inhalation; Long term systemic effects: 1.8 mg/m³
- Consumer - Dermal; Long term systemic effects: 7500 mg/kg/day
- Consumer - Oral; Long term systemic effects: 1.5 mg/kg/day

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. Care should be taken not to inhale spray. No personal protective equipment is necessary.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance
Clear pale green liquid

Odour
Mild Alcoholic

pH
pH (concentrated solution): 6.0-8.0

Initial boiling point and range
Not measured (>100°C)
Anti-fog Glass Cleaner

**Flash point**
Not determined.

**Flammability (solid, gas)**
Does not ignite. Not flammable

**Vapour pressure**
Not available.

**Vapour density**
> 1 (Air=1)

**Relative density**
0.99-1.00

**Solubility (ies)**
Soluble in water

**Viscosity**
Not measured

**Explosive properties**
None

**Oxidising properties**
Not determined.

**9.2. Other information**
Other information
None.

SECTION 10: Stability and reactivity

10.1. Reactivity
No reactivity hazards expected.

10.2. Chemical stability

**Stability**
Stable under normal conditions.

10.3. Possibility of hazardous reactions
None under normal conditions.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials

Materials to avoid
None known.

10.6. 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.
Anti-fog Glass Cleaner

Toxicological information on ingredients.

Isopropanol

Acute toxicity - oral
Acute toxicity oral (LD₅₀ mg/kg)
5,820.0
Species
Rat
ATE oral (mg/kg)
5,820.0

Acute toxicity - dermal
Acute toxicity dermal (LD₅₀ mg/kg)
12800.0
Species
Rabbit
ATE dermal (mg/kg)
12800.0

SECTION 12: Ecological Information

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

Ecological information on ingredients.

Isopropanol

Acute toxicity - fish
LC₅₀, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates
EC₅₀, 48 hours: 13299 mg/l, Daphnia magna

Acute toxicity - aquatic plants
EC₅₀, 72 hours: 1.000 mg/l, Desmodesmus subspicatus

Acute toxicity - microorganisms
EC₅₀, : >1000 mg/l, Activated sludge

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

Ecological information on ingredients.

Isopropanol

Biodegradation
- Degradation 95: 21 days

12.3. Bioaccumulative potential
Not determined.

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
No data available.

12.6. 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
Anti-fog Glass Cleaner

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 MARPOL73/78 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

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

SECTION 16: Other information

Issued by
The London Oil Refining Company Ltd

Revision date
18/03/2015

Revision
1

SDS number
5011

Risk phrases in full
R11 Highly flammable.
R36 Irritating to eyes.
R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.