SAFETY DATA SHEET
Descaler Limescale Remover

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

1.1. Product identifier
Product name: Descaler Limescale Remover
Internal identification: F3V1

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Removing limescale from kitchen utensils and appliances.

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

2.2. Label elements
Pictogram

Signal word: Warning
Hazard statements: H319 Causes serious eye irritation.
Precautionary statements:
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.
P264 Wash hands thoroughly after handling.
P280 Wear eye and face protection.
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.

Additional Detergent Labelling

1/5
2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric Acid Monohydrate</td>
<td>10-30%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS number:</th>
<th>EC number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5949-29-1</td>
<td>201-069-1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification (67/548/EEC or 1999/45/EC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2 - H319</td>
</tr>
</tbody>
</table>

Xi; R36

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 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
Descaler Limescale Remover

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 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)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Citric Acid Monohydrate (CAS: 5949-29-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNEC</td>
</tr>
<tr>
<td>- Fresh water; 0.44 mg/l</td>
</tr>
<tr>
<td>- Sediment (Freshwater); 3.46 mg/kg</td>
</tr>
<tr>
<td>- Sediment (Marinewater); 34.6 mg/kg</td>
</tr>
<tr>
<td>- Marine water; 0.044 mg/l</td>
</tr>
<tr>
<td>- STP; &gt;1000 mg/l</td>
</tr>
<tr>
<td>- Soil; 33.1 mg/kg</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance
Clear colourless liquid

Colour
Colourless.

Odour
Odourless

pH
pH (concentrated solution): 1.35 - 2.30

Initial boiling point and range
Not measured (>100°C)

Flammability (solid, gas)
Does not ignite.

Vapour density
> 1 (Air=1)

Relative density
1.050 - 1.090

Solubility(ies)
Soluble in water

Viscosity
Not determined.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity
Descaler Limescale Remover

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.

Toxicological information on ingredients.

<table>
<thead>
<tr>
<th>Citric Acid Monohydrate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute toxicity - oral</strong></td>
</tr>
<tr>
<td>Acute toxicity oral (LD₅₀ mg/kg)</td>
</tr>
<tr>
<td>5,400.0</td>
</tr>
<tr>
<td><strong>Species</strong></td>
</tr>
<tr>
<td>Rat</td>
</tr>
<tr>
<td><strong>ATE oral (mg/kg)</strong></td>
</tr>
<tr>
<td>5,400.0</td>
</tr>
<tr>
<td><strong>Acute toxicity - dermal</strong></td>
</tr>
<tr>
<td>Acute toxicity dermal (LD₅₀ mg/kg)</td>
</tr>
<tr>
<td>2000.0</td>
</tr>
<tr>
<td><strong>Species</strong></td>
</tr>
<tr>
<td>Rabbit</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Citric Acid Monohydrate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute toxicity - fish</strong></td>
</tr>
<tr>
<td>LC₅₀, 48 hours: 440 mg/l, Fish</td>
</tr>
<tr>
<td><strong>Acute toxicity - aquatic invertebrates</strong></td>
</tr>
<tr>
<td>EC₅₀, 24 hours: 1535 mg/l, Daphnia magna</td>
</tr>
<tr>
<td><strong>Acute toxicity - aquatic plants</strong></td>
</tr>
<tr>
<td>NOEC, 8 days: 425 mg/l, Algae</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability
Does not contain any components considered to be persistent.

12.3. Bioaccumulative potential

Bioaccumulation is not expected.

12.4. Mobility in soil

Mobility
Descaler Limescale Remover

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

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 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

SECTION 16: Other information

Issued by
The London Oil Refining Company Ltd

Revision date
08/04/2015

Revision
1

SDS number
5039

Risk phrases in full
R36 Irritating to eyes.

Hazard statements in full
H319 Causes serious eye irritation.