1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY

Trade name : Rinse aid for dishwashers
Type of product : Liquid.
Use : Domestic.
Company identification : ECOVER BELGIUM NV
                      Industrieweg 3
                      2390 Malle Belgique-Belgie
E-mail: sds@ecover.com
Phone : +32 (0)3 309 25 00
Fax : +32 (0)3 311 72 70
Emergency phone nr : +32 (0)70 245 245 (Antipoison Centre Belgium)
Responsible for placing on the market : See address above.

2. HAZARDS IDENTIFICATION

Hazards identification : Not classified as dangerous product.
Symptoms relating to use
- Inhalation : No special hazards in normal use. Narcotic effects, dizziness and headaches may occur with high vapour concentrations.
- Skin contact : Not expected to present a significant skin hazard under anticipated conditions of normal use.
- Eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
- Ingestion : Sore throat.
              Dizziness.
              Drowsiness.
Fire hazard : Above 33°C explosive vapour/air mixtures may be formed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Preparation : Preparation.
Components : This product is not hazardous but contains hazardous components.
Composition : Regulation (CE) No. 648/2004 of 31 March 2004 on detergents:
              5% - 15% : - Nonionic surfactants
Substance name | Contents | CAS No | EC No | Index No | Classification
Ethanol         | Between 15 and 30 % | 64-17-5 | 200-578-6 | 603-002-00-5 | F; R11
Citric acid    | Between 5 and 15 % | 77-92-9 | 201-069-1 | ------ | Xi; R36/37/38
INCI           | ALCOHOL
               | CITRIC ACID

4. FIRST AID MEASURES

First aid measures
- Inhalation : Rest.
              Remove victim to fresh air.
- Skin contact : Flush with plenty of water.
4. FIRST AID MEASURES (continued)

- Eye contact: Rinse immediately with plenty of water.
- Ingestion: Drink large quantities of milk or water. Do not induce vomiting.

Note to physician: No specific recommendations.
Workplace equipment: No specific recommendations.

5. FIRE-FIGHTING MEASURES

Extinguishing media:
- Suitable extinguishing media: All extinguishing media can be used. Alcoholresistant foam.
- Unsuitable extinguishing media: Do not use a heavy water stream.

Protection against fire: Do not enter fire area without proper protective equipment, including respiratory protection.
Special procedures: Cool heat-exposed product with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Spill area may be slippery. Ensure adequate air ventilation. Ensure a sparkless environment. See Heading 8.

Environmental precautions: Avoid release to the environment. Prevent entry to sewers and public waters.

Clean up methods: Recover spilled material as much as possible in a clean container for reuse. Spilled product must be collected with sand or an inert absorbent material and dispose of as chemical waste. Rinse away remainder with water.

7. HANDLING AND STORAGE

Protection against fire: Keep away from sparks, open fire and oxidising agents. Above 30°C closed equipment, ventilation, explosion safe electrical equipment. When using do not smoke.

Storage: Store in a cool, well ventilated and fireproof area, in tightly closed original packaging. Keep out of the reach of children.

Handling: Avoid contact with skin and eyes. See Heading 8.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection:
- Skin protection: No special clothing/skin protection equipment is recommended under normal conditions of use. Wear waterproof gloves (preferably neoprene or nitrile rubber) in case of intensive use or contact with undiluted product.
- Eye protection: Wear safety goggles when clearing accidentally released material.
- Respiratory protection: Ensure sufficient ventilation when taking up intensively material which is accidentally released.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

Environment protection see § 6
Occupational Exposure Limits:
  - Ethanol: MAC [mg/m³]: 1900
  - Ethanol: MAC [ppm]: 1000

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state at 20 °C: Liquid.
Colour: Slightly yellow.
Odour: Odourless.
pH value (concentrated product): 2
Density: 1,013 kg/l
Viscosity: 13,2 cP
Solubility in water: Complete.
Flash point [°C]: 33
Volatile Organic Compounds (%): 23.04
Explosion limits: Above 33°C explosive vapour/air mixtures may be formed.
Oxidising properties: None.

10. STABILITY AND REACTIVITY

Stability and reactivity: No decomposition under normal conditions of storage and use.
Conditions to avoid: Open flame. Overheating. Do not store <0°C and >25°C.
Materials to avoid: Do not mix with other cleaning products (and certain not with chlorous products).
Reacts violently with strong oxidising agents, causing fire and explosion hazard.
Hazardous decomposition products: None under normal conditions.

11. TOXICOLOGICAL INFORMATION

Eye irritatie (RBC test: Mean Indices): No data available.
Ocular Irritancy:
Skin irritation (RBC test: Denaturation Index): No data available.
Evaluation of the security for the human health:
- Dermal: Irritation due to the composition.
- Ocular: Irritation due to the composition.
- Ingestion: Hardy toxic (LD 50 rat-oral-theoretic >3500 ppm).
Sensitization: To the best of our knowledge, this product contains no sensitizing raw materials.
Note: Contains only ELINCS or EINECS registered raw materials and does not contain any ingredients known to be mutagenic, carcinogenic, teratogenic or reproduction toxic (R45,46,47,49,60,61,63,64, EU 97/C234, 67/548/EEC, 88/379/EEC, OSHA, NTP, IARC/ARAB (cat 1-3)).

12. ECOLOGICAL INFORMATION

Ecological effects information
### 12. ECOLOGICAL INFORMATION (continued)

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodegradation [%] Sapromat respirometry test (OECD 301 F)</td>
<td>100 Biodegradable.</td>
</tr>
<tr>
<td>EC50 72h Algae (Selenastrum capricornutum) [ppm] (OECD 201)</td>
<td>105 Hardly toxic.</td>
</tr>
<tr>
<td>48 Hour EC50 Daphnia magna [ppm] (OECD 202)</td>
<td>592 Hardly toxic.</td>
</tr>
<tr>
<td>Rotifer toxicity (Brachionus calyciflorus) EC50 24h (ppm) (ASTM E1440-91)</td>
<td>353 Hardly toxic.</td>
</tr>
</tbody>
</table>

**Remarks:** Ecover products do not contain any bioaccumulating raw materials and no PCM or nitromusk perfume components. The surface active components used in this product fulfill all of the biodegradability requirements of EC regulation 648/2004.

### 13. DISPOSAL CONSIDERATIONS

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>Dispose of this material and its container at hazardous or special waste collection point.</td>
</tr>
<tr>
<td>Product</td>
<td>Waste of this product is considered chemical waste. The legislation concerning disposal of waste can differ from one country/state to another. The disposal should therefore be done according to national or local waste legislation. If in doubt, ask the local waste management authority for advice (also see § 6 and § 8 when disposing of).</td>
</tr>
<tr>
<td>Packaging</td>
<td>The empty packaging of this product is not subject to ADR. Cleaned empty packaging (including labels and caps) is fully recyclable (HDPE + PP); they may be collected selectively for recycling according to national or local waste legislation. Uncleaned packaging should be disposed of as chemical waste.</td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

**General information:** Not classified.

### 15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>R Phrase(s)</th>
<th>S Phrase(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None.</td>
<td>S2 : Keep out of the reach of children. S3 : Keep in a cool place. S7 : Keep container tightly closed. S16 : Keep away from sources of ignition - No smoking.</td>
</tr>
</tbody>
</table>

### 16. OTHER INFORMATION

**Training advice:** For correct use of this product: see Technical Data Sheet.

**List of relevant R phrases (heading 3):** R11 : Highly flammable. R36/37/38 : Irritating to eyes, respiratory system and skin.

**Sources of key data used:** MSDS and additional literature data of the respective suppliers. Chemical cards, 12th edition, 1997, ed. MIA, VMCI, Samson Comprehensive guide to chemical resistant best gloves for various amounts of exposure, 1999, ver.3.5 www
16. OTHER INFORMATION (continued)

Revision : First version of this MSDS in this new format.
Print date : 22 / 7 / 2009

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006

DISCLAIMER OF LIABILITY  The information in this SDS was obtained from sources which we believe are reliable. However, the
information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of
handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other
reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way
connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this
product. If the product is used as a component in another product, this MSDS information may not be applicable.

End of document