Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Keurig® Descaling Solution
- **Relevant identified uses of the substance or mixture and uses advised against**
  - **Application of the substance / the preparation:** Descaler for coffee and food service equipment
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - Urnex Brands, Inc.
    - 700 Executive Blvd., Elmsford, NY 10523 USA
    - Phone: +1-914-963-2042
  - **Supplier:** Urnex Brands, Inc.
    - 29 Harley Street, London, W1G 9QR
    - United Kingdom
    - Tel: +44 (0)20 7927 6881
    - Fax: +1-914-963-2145
    - Email: info@urnex.com
- **Emergency telephone number:**
  - Tel.: 800-424-9300 (USA)
  - Tel.: 001-703-527-3887 (INTERNATIONAL COLLECT ACCEPTED)

Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to OSHA HCS 2012**
    - Skin Irrit. 2 H315 Causes skin irritation.
    - Eye Irrit. 2 H319 Causes serious eye irritation.
- **Label elements**
  - **Labelling according to OSHA HCS 2012**
    - The product is classified and labelled according to the CLP regulation.
  - **Hazard pictograms**
  - ![GHS07]
- **Signal word** Warning
- **Hazard statements**
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
- **Precautionary statements**
  - P264 Wash thoroughly after handling.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P362 Take off contaminated clothing and wash before reuse.
  - P332+P313 If skin irritation occurs: Get medical advice/attention.
  - P337+P313 If eye irritation persists: Get medical advice/attention.
  - P302+P352 IF ON SKIN: Wash with plenty of soap and water.

(Contd. on page 2)
Trade name: Keurig® Descaling Solution

- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not determined
    - vPvB: Not determined

3 Composition/information on ingredients

- Chemical characterization: Mixtures

  - Dangerous components:
    - CAS: 77-92-9 citric acid < 12%
    - Skin Irrit. 2, H315; Eye Irrit. 2, H319

4 First aid measures

- Description of first aid measures
  - General information: Take affected persons out of danger area and lay down.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Immediately wash with water and soap and rinse thoroughly.
  - After eye contact:
    - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing:
    - Rinse out mouth and then drink plenty of water.
    - If symptoms persist consult doctor.
  - Information for doctor:
    - Most important symptoms and effects, both acute and delayed No further relevant information available.
    - Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

- Extinguishing media
  - Suitable extinguishing agents:
    - CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
    - Use fire extinguishing methods suitable to surrounding conditions.
  - Special hazards arising from the substance or mixture Carbon monoxide (CO)
  - Advice for firefighters
  - Protective equipment: Wear self-contained respiratory protective device.
  - Additional information
    - Cool endangered receptacles with water spray.
    - Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Ensure adequate ventilation
  - Wear protective clothing.
- Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Ensure adequate ventilation.

(Contd. on page 3)
7 Handling and storage

- **Handling:**
  - **Precautions for safe handling**
    - Ensure good ventilation/exhaustion at the workplace.
    - Prevent formation of aerosols.
  - **Information about fire and explosion protection:** Keep respiratory protective device available.
  - **Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
    - **Information about storage in one common storage facility:** Store away from oxidizing agents.
    - **Further information about storage conditions:**
      - Keep container tightly sealed.
      - Store under lock and key and out of the reach of children.
  - **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
  - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Exposure controls**
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    - Do not inhale gases / fumes / aerosols.
    - The usual precautionary measures are to be adhered to when handling chemicals.
  - **Respiratory protection:** Not necessary if room is well-ventilated.
  - **Protection of hands:** Not required.
  - **Material of gloves**
    - Natural rubber, NR
    - Nitrile rubber, NBR
  - **Penetration time of glove material**
    - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - **Eye protection:** Safety glasses
  - **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - **Form:** Fluid
  - **Colour:** According to product specification
### Trade name: Keurig® Descaling Solution

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>pH-value (10 g/l) at 20°C</td>
<td>2.5-3.0</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Self-igniting</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Soluble.</td>
</tr>
<tr>
<td>Solvent content</td>
<td></td>
</tr>
<tr>
<td>Organic solvents</td>
<td>0.0 %</td>
</tr>
<tr>
<td>Solids content</td>
<td>&lt;12 %</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

#### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
- **Possibility of hazardous reactions**: No dangerous reactions known.
- **Conditions to avoid**: No further relevant information available.
- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**: No dangerous decomposition products known.

#### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
  - **LD/LC50 values relevant for classification**:
    - **Citric acid**
      - Oral LD50: 5040 mg/kg (mouse), 11700mg/kg (Rat)
- **Primary irritant effect**:
  - **on the skin**: No irritant effect.
  - **on the eye**: No irritating effect.
- **Sensitization**: No sensitizing effects known.

#### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity**: No further relevant information available.
- **Persistence and degradability**: No further relevant information available.
- **Behaviour in environmental systems**: No further relevant information available.
- **Bioaccumulative potential**: No further relevant information available.
13 Disposal considerations

- Waste treatment methods
  - Recommendation: Smaller quantities can be disposed of with household waste.

- Uncleaned packaging
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - ADR, IMDG, IATA: Void

- UN proper shipping name
  - ADR, IMDG, IATA: Void

- Transport hazard class(es)
  - ADR, IMDG, IATA: Void

- Packing group
  - ADR, IMDG, IATA: Void

- Environmental hazards:
  - Marine pollutant: No

- Special precautions for user
  - Not applicable.

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
  - Not applicable.

- UN "Model Regulation": -

15 Regulatory information

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
### Abbreviations and acronyms:

- **ADR**: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- **IMDG**: International Maritime Code for Dangerous Goods
- **IATA**: International Air Transport Association
- **GHS**: Globally Harmonized System of Classification and Labelling of Chemicals
- **LC50**: Lethal concentration, 50 percent
- **LD50**: Lethal dose, 50 percent