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

- **1.1 Product identifier**
  - **Trade name:** De-Solv-It® Microwave Miracle

- **Article number:** 20271

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - **Sector of Use**
    - SU21  Consumer uses: Private households / general public / consumers
    - SU22   Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

- **Application of the substance / the mixture** Cleaning agent / Cleaner

- **1.3 Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - ZEP UK Ltd
    - PO Box 12 Tanhouse Lane
    - Widnes Cheshire, WA8 0RD
    - United Kingdom
    - Phone: +44 0151 422 1000
    - FAX: +44 0151 422 1011
    - @: info@zep.co.uk
    - web: www.zep.co.uk

    - ZEP Industries BV
    - Vierlinghweg 30
    - 4612 PN Bergen op Zoom
    - The Netherlands
    - Tel: (NL) + 31 164 250 100 (B) + 32 2 347 0117
    - Fax:(NL) + 31 164 266 710 (B) + 32 2 347 1395
    - @: sales@zepbenelux.com

    - ZEP ITALIA SRL
    - Via Netunese Km. 25 000
    - 04011 Aprilia (LT) - Italy
    - Tel: +39.069 266 91
    - Fax: +39.06.92747061
    - @: tecnico@zepeurope.com
    - Sito: www.zep.it

- **Further information obtainable from:**
  - Customer Service
    - NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710
    - B: Tel: +32 2 347 0117 Fax: +32 2 347 1395
    - IT: Tel: +39 069 266 91Fax: +39 06.927 470 61
    - UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

- **1.4 Emergency telephone number:**
  - Customer Service
    - NL: Tel: + 31 164 250 100 Fax: + 31 164 266 710
    - B: Tel: +32 2 347 0117 Fax: +32 2 347 1395
    - IT: Tel: +39 069 266 91Fax: +39 06.927 470 61
    - UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008** The substance is not classified according to the CLP regulation.

- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void

- **Precautionary statements**
  - **P260** Do not breathe spray.
  - **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 information:**
  - Keep out of the reach of children

(Contd. on page 2)
SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>CAS:</th>
<th>EINECS:</th>
<th>Reg.nr.:</th>
<th>Chemical characterisation</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-98-2</td>
<td>203-339-1</td>
<td>01-2119457435-35-xxxx</td>
<td>1-methoxy-2-propanol</td>
<td>1-2.5%</td>
</tr>
<tr>
<td>68424-85-1</td>
<td>270-325-2</td>
<td>01-2119983287-23-XXXX</td>
<td>N-Alkyl-N,N-dimethyl-N-benzylammonium Chloride</td>
<td>0.1-1%</td>
</tr>
</tbody>
</table>

Ingredients according to Detergents Regulation 648/2004/EC

Nonionic surfactants, Amphoteric surfactants, Benzalkonium Chloride < 5%
Preservation agents (METHYLISOTHIAZOLINONE, BENZISOTHIAZOLINONE) < 5%

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: No special measures required.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Not required.

6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course. Dilute with plenty of water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special measures required.

Information about fire - and explosion protection:

No special measures required.
**7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: None.

- **7.3 Specific end use(s)**
  - No further relevant information available.

### SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>WEL (Great Britain)</th>
<th>IOELV (European Union)</th>
<th>Skin</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-98-2 1-methoxy-2-propanol</td>
<td>Short-term value: 560 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm Sk</td>
<td>Short-term value: 568 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm Skin</td>
<td></td>
</tr>
<tr>
<td>1310-58-3 Potassium hydroxide</td>
<td>WEL (Great Britain) Short-term value: 2 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**8.2 Exposure controls**

- **Personal protective equipment:**
  - General protective and hygienic measures: Avoid close or long term contact with the skin.
  - Respiratory protection: Not necessary if room is well-ventilated.
  - Protection of hands: To avoid skin problems reduce the wearing of gloves to the required minimum.

<table>
<thead>
<tr>
<th>Protective gloves</th>
<th>Material of gloves</th>
<th>Penetration time of glove material</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generally the product does not irritate the skin. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.</td>
<td>The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
Trade name: De-Solv-It® Microwave Miracle

· Eye protection: Goggles recommended during refilling

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties
  · General Information
  · Appearance:
    Form: Liquid
    Colour: Yellow tint
    Odour: Fruit-like
  · pH-value: 11
  · Change in condition
    Melting point/Melting range: Undetermined.
    Boiling point/Boiling range: 100 °C
  · Flash point: Not applicable.
  · Flammability (solid, gaseous): Not applicable.
  · Ignition temperature:
    Decomposition temperature: Not determined.
    Self-igniting: Product is not selfigniting.
  · Danger of explosion:
    Product does not present an explosion hazard.
  · Explosion limits:
    Lower: Not determined.
    Upper: Not determined.
  · Vapour pressure at 20 °C: 23 hPa
  · Density at 20 °C: 1.001 g/cm³
  · Relative density: Not determined.
  · Vapour density: Not determined.
  · Evaporation rate: Not determined.
  · Solubility in / Miscibility with water: Fully miscible.
  · Partition coefficient (n-octanol/water): Not determined.
  · Viscosity:
    Dynamic: Not determined.
    Kinematic: Not determined.
  · Solvent content:
    Organic solvents: 2.0 %
  · 9.2 Other information
    No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity
· 10.2 Chemical stability
· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
· 10.3 Possibility of hazardous reactions No dangerous reactions known.
· 10.4 Conditions to avoid No further relevant information available.
· 10.5 Incompatible materials: No further relevant information available.
· 10.6 Hazardous decomposition products: No dangerous decomposition products known.
SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50 / 4 h</th>
<th>EC 50 / 48 h (static)</th>
<th>LC50 / 96 h (static)</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-98-2 1-methoxy-2-propanol</td>
<td>4016 mg/kg</td>
<td>2000 mg/kg</td>
<td>27596 mg/ltr</td>
<td>23300 mg/ltr</td>
<td>6812 mg/ltr</td>
</tr>
<tr>
<td>68424-85-1 N-Alkyl-N,N-dimethyl-N-benzylammonium Chloride</td>
<td>344 mg/kg</td>
<td>3340 mg/kg</td>
<td>0.016 mg/ltr</td>
<td>0.515 mg/ltr</td>
<td>0.93 mg/ltr</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.28 mg/ltr</td>
</tr>
</tbody>
</table>

Primary irritant effect:

Skin corrosion/irritation: No irritant effect.

Serious eye damage/irritation: No irritating effect.

Respiratory or skin sensitisation: No sensitising effects known.

Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

<table>
<thead>
<tr>
<th>Compound</th>
<th>OECD test 301 B</th>
<th>OECD test 301 D</th>
</tr>
</thead>
<tbody>
<tr>
<td>68424-85-1 N-Alkyl-N,N-dimethyl-N-benzylammonium Chloride</td>
<td>93.5 % (biodegradation in % after 28 days)</td>
<td>&gt;60% (biodegradation in % after 28 days)</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

Smaller quantities can be disposed of with household waste.

Uncleaned packaging:

Recommendation: Dispose of packaging according to regulations on the disposal of packagings.
SECTION 14: Transport information

- 14.1 UN-Number
  ADR, ADN, IMDG, IATA Void

- 14.2 UN proper shipping name
  ADR, ADN, IMDG, IATA Void

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

- 14.4 Packing group
  ADR, IMDG, IATA Void

- 14.5 Environmental hazards:
  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

  National regulations:
  Technical instructions (air):

<table>
<thead>
<tr>
<th>Class</th>
<th>Share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>NK</td>
<td>1-2,5</td>
</tr>
</tbody>
</table>

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

SECTION 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
  H226 Flammable liquid and vapour.
  H302 Harmful if swallowed.
  H314 Causes severe skin burns and eye damage.
  H335 May cause drowsiness or dizziness.
  H400 Very toxic to aquatic life.

- Department issuing MSDS:
  Customer Service
  NL: Tel: +31 164 250 100 Fax: +31 164 266 710
  B: Tel: +32 2 347 0117 Fax: +32 2 347 1395
  IT: Tel: +39 069 266 91 Fax: +39 06 927 470 61
  UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

- Contact:
  Customer Service
  NL: Tel: +31 164 250 100 Fax: +31 164 266 710
  B: Tel: +32 2 347 0117 Fax: +32 2 347 1395
  IT: Tel: +39 069 266 91 Fax: +39 06 927 470 61
  UK: Tel: +44 151 422 1000 Fax: +44 151 422 1011

- 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 Harmonised System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  DNEL: Derived No-Effect Level (REACH)
  PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 3: Flammable liquids, Hazard Category 3
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

* Data compared to the previous version altered.