SAFETY DATA SHEET of:
APLEMONFRESH

Revision date: Wednesday, January 20, 2016

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

1.1 Product identifier:

APLEMONFRESH

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Concentration in use: /

1.3 Details of the supplier of the safety data sheet:

SGI Industries LTD
Suite 1, Franklyn House,Daux Road,Billingshurst
RH14 9SJ WEST SUSSEX
Phone: +4408452601990 — Fax: +4408452601995
E-mail: info@sgiindustries.com — Website: http://www.sgiindustries.com/

1.4 Emergency telephone number:

1114647

2 SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:
Classification of the substance or mixture in accordance with regulation (EU) 1272/2008:

H302 Acute tox. 4  H315 Skin Irrit. 2  H317 Skin Sens. 1  H318 Eye Dam. 1  H411 Aquatic Chronic 2

2.2 Label elements:

Pictograms:

Signal word:

Danger
Hazard statements:

H302 Acute tox. 4: Harmful if swallowed.
H315 Skin Irrit. 2: Causes skin irritation.
H317 Skin Sens. 1: May cause an allergic skin reaction.
H318 Eye Dam. 1: Causes serious eye damage.
H411 Aquatic Chronic 2: Toxic to aquatic life with long lasting effects.

Precautionary statements:

P280: Wear protective gloves, protective clothing, eye protection, face protection.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
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+P364: Take off contaminated clothing and wash it before reuse.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Contains:

Citral  Isotridecanol, ethoxylated  Fattyalcohol C10 -14, ethoxylated  Didecylldimethylammoniumchloride

2.3 Other hazards:

none

3 SECTION 3: Composition/information on ingredients:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage</th>
<th>CAS number</th>
<th>EINECS:</th>
<th>REACH Registration number:</th>
<th>CLP Classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fattyalcohol C10 -14, ethoxylated</td>
<td>5% - 15%</td>
<td>68439-45-2</td>
<td></td>
<td></td>
<td>H302 Acute tox. 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H318 Eye Dam. 1</td>
</tr>
<tr>
<td>1-methoxypropan-2-ol</td>
<td>5% - 15%</td>
<td>107-98-2</td>
<td></td>
<td></td>
<td>203-539-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>01-2119457435-35</td>
<td></td>
<td></td>
<td>H226 Flam. Liq. 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H336 STOT SE 3</td>
</tr>
<tr>
<td>Isotridecanol, ethoxylated</td>
<td>5% - 15%</td>
<td>69011-36-5</td>
<td></td>
<td></td>
<td>H302 Acute tox. 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H318 Eye Dam. 1</td>
</tr>
<tr>
<td>Citral</td>
<td>5% - 15%</td>
<td>5392-40-5</td>
<td></td>
<td></td>
<td>226-394-6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H315 Skin Irrit. 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H317 Skin Sens. 1</td>
</tr>
</tbody>
</table>
Didecyldimethylammoniumchloride | < 5% | CAS number: 7173-51-5  
EINECS: 230-525-2  
REACH Registration number:  
CLP Classification: H301 Acute tox. 3  
H314 Skin Corr. 1B  
H400 Aquatic Acute 1  
H410 Aquatic Chronic 1

Ethanol | < 5% | CAS number: 64-17-5  
EINECS: 200-578-6  
REACH Registration number: 01-2119457610-43  
CLP Classification: H225 Flam. Liq. 2  
H319 Eye Irrit. 2

Isopropanol | < 5% | CAS number: 67-63-0  
EINECS: 200-661-7  
REACH Registration number: 01-2119457558-25  
CLP Classification: H225 Flam. Liq. 2  
H319 Eye Irrit. 2  
H336 STOT SE 3

For the full text of the H & R phrases mentioned in this section, see section 16.

4 SECTION 4: First aid measures:

4.1 Description of first aid measures:
Always ask medical advice as soon as possible should serious or continuous disturbances occur.

Skin contact: remove contaminated clothing, rinse skin with plenty of water and immediately transport to hospital.

Eye contact: first prolonged rinsing with water (contact lenses to be removed if this is easily done) then take to physician.

Ingestion: rinse mouth, do not induce vomiting, take to hospital immediately.

Inhalation: let sit upright, fresh air, rest and take to hospital.

4.2 Most important symptoms and effects, both acute and delayed:

Skin contact: caustic, redness, pain, serious burns

Eye contact: caustic, redness, bad looking, pain

Ingestion: caustic, lack of breath, vomiting, blisters on lips and tongue, burning pain in mouth and throat, gullet and stomach

Inhalation: headache, dizziness, nausea, drowsiness, unconsciousness

4.3 Indication of any immediate medical attention and special treatment needed:

none

5 SECTION 5: Fire-fighting measures:

5.1 Extinguishing media:
CO2, foam, powder, sprayed water

5.2 Special hazards arising from the substance or mixture:

none
5.3 Advice for firefighters:
Extinguishing agents to be avoided: none

6 SECTION 6: Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:
Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind. Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

6.2 Environmental precautions:
do not allow to flow into sewers or open water.

6.3 Methods and material for containment and cleaning up:
remove by using absorbent material.

6.4 Reference to other sections:
for further information check sections 8 & 13.

7 SECTION 7: Handling and storage:

7.1 Precautions for safe handling:
handle with care to avoid spillage.

7.2 Conditions for safe storage, including any incompatibilities:
keep in a sealed container in a closed, frost-free, ventilated room.

7.3 Specific end use(s):
/

8 SECTION 8: Exposure controls/personal protection:

8.1 Control parameters:
Listing of the hazardous ingredients in section 3, of which the TLV value is known
Ethanol 1,907 mg/m³, Isopropanol 997 mg/m³, 1-methoxypropan-2-ol 375 mg/m³

8.2 Exposure controls:

<table>
<thead>
<tr>
<th>Inhale protection</th>
<th>use with sufficient exhaust ventilation. If necessary, use an air-purifying face mask in case of respiratory hazards. Use the ABEK type as protection against these troublesome levels.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin protection</td>
<td>handling with nitril-gloves (EN 374). Breakthrough time: &gt;480'. Material thickness: 0.35 mm. Thoroughly check gloves before use. Take off the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands.</td>
</tr>
</tbody>
</table>
**Eye protection:** keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems.

**Other protection:** impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question.

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9 **SECTION 9: Physical and chemical properties:**

9.1 **Information on basic physical and chemical properties:**

- **Melting point/melting range:** 0 °C
- **Boiling point/Boiling range:** 78 °C — 100 °C
- **pH:** 9.2
- **pH 1% diluted in water:** /  
- **Vapour pressure/20°C:** 2 332 Pa  
- **Vapour density:** not applicable  
- **Relative density, 20°C:** 0.997 kg/l  
- **Appearance/20°C:** liquid  
- **Flash point:** /  
- **Flammability (solid, gas):** not applicable  
- **Auto-ignition temperature:** 270 °C  
- **Upper flammability or explosive limit, (Vol %):** 13.100 %  
- **Lower flammability or explosive limit, (Vol %):** 1.900 %  
- **Explosive properties:** not applicable  
- **Oxidising properties:** not applicable  
- **Decomposition temperature:** /  
- **Solubility in water:** completely soluble  
- **Partition coefficient: n-octanol/water:** not applicable  
- **Odour:** characteristic  
- **Odour threshold:** not applicable  
- **Dynamic viscosity, 20°C:** 10 mPa.s  
- **Kinematic viscosity, 20°C:** 10 mm²/s  
- **Evaporation rate (n-BuAc = 1):** 2.000

9.2 **Other information:**

- **Volatile organic component (VOC):** 11.50 %  
- **Volatile organic component (VOC):** 139.580 g/l

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10 **SECTION 10: Stability and reactivity:**

10.1 **Reactivity:**

stable under normal conditions.

10.2 **Chemical stability:**

extremely high or low temperatures.
10.3 Possibility of hazardous reactions:
none

10.4 Conditions to avoid:
protect from sunlight and do not expose to temperatures exceeding + 50°C.

10.5 Incompatible materials:
acids, alkalines, oxidants, reductants

10.6 Hazardous decomposition products:
doesn’t decompose with normal use

11 SECTION 11: Toxicological information:

11.1 Information on toxicological effects:

H302 Acute tox. 4: Harmful if swallowed.
H315 Skin Irrit. 2: Causes skin irritation.
H317 Skin Sens. 1: May cause an allergic skin reaction.
H318 Eye Dam. 1: Causes serious eye damage.

Calculated acute toxicity, ATE oral: 1 676.437 mg/kg
Calculated acute toxicity, ATE dermal: /

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50 oral, rat:</th>
<th>LD50 dermal, rabbit:</th>
<th>LC50, Inhalation, rat, 4h:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fattyalcohol C10 -14, ethoxylated</td>
<td>500 mg/kg</td>
<td>≥ 5,000 mg/kg</td>
<td>≥ 50 mg/l</td>
</tr>
<tr>
<td>1-methoxypropan-2-ol</td>
<td>4,016 mg/kg</td>
<td>2,000 mg/kg</td>
<td>≥ 50 mg/l</td>
</tr>
<tr>
<td>Isotridecanol, ethoxylated</td>
<td>500 mg/kg</td>
<td>≥ 5,000 mg/kg</td>
<td>≥ 50 mg/l</td>
</tr>
<tr>
<td>Citral</td>
<td>4,960 mg/kg</td>
<td>≥ 5,000 mg/kg</td>
<td>≥ 50 mg/l</td>
</tr>
<tr>
<td>Didecyldimethylammoniumchloride</td>
<td>238 mg/kg</td>
<td>3,342 mg/kg</td>
<td>≥ 50 mg/l</td>
</tr>
<tr>
<td>Ethanol</td>
<td>≥ 5,000 mg/kg</td>
<td>≥ 5,000 mg/kg</td>
<td>≥ 50 mg/l</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>≥ 5,000 mg/kg</td>
<td>≥ 5,000 mg/kg</td>
<td>≥ 50 mg/l</td>
</tr>
</tbody>
</table>
12 SECTION 12: Ecological information:

12.1 Toxicity:

<table>
<thead>
<tr>
<th>Substance</th>
<th>LC50 (Fish)</th>
<th>EC50 (Daphnia)</th>
<th>NOEC (Fish)</th>
<th>EC50 (Daphnia)</th>
<th>NOEC (Algae)</th>
<th>EC50 (soil microorganisms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-methoxypropan-2-ol</td>
<td>6812 mg/l (Leuciscus idus) 96h</td>
<td>23300 mg/l, 48h</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Didecyldimethylammoniumchloride</td>
<td>0.19 mg/L (Pimephales promelas) (96h) (US-EPA)</td>
<td>0.062 mg/L (48h)</td>
<td>0.032 mg/L (Danio rerio) (34d) OECD 210</td>
<td>0.010 mg/L (21 d) OECD 211</td>
<td>0.026 mg/L (Pseudokirchneriella subcapitata) (96h) OECD 201</td>
<td>0.013 mg/L</td>
</tr>
<tr>
<td>Ethanol</td>
<td>13000 mg/L (Oncorhynchus mykiss)(96h)</td>
<td>12340 mg/L (48h)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropanol</td>
<td>10000 mg/l</td>
<td>&gt; 10000 mg/L (24h)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability:

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3 Bioaccumulative potential:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Additional data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-methoxypropan-2-ol</td>
<td>Log Pow = -0.4</td>
</tr>
<tr>
<td>Ethanol</td>
<td>Log Pow: -0.35</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>Log Pow: 0.05</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil:

Water hazard class, WGK: 2
Solubility in water: completely soluble

12.5 Results of PBT and vPvB assessment:

No additional data available

12.6 Other adverse effects:

No additional data available

13 SECTION 13: Disposal considerations:

13.1 Waste treatment methods:

Draining into the sewers is not permitted. Removal should be carried out by licensed services. Possible restrictive regulations by local authority should always be adhered to.
14 SECTION 14: Transport information:

14.1 UN number:
3082

14.2 UN proper shipping name:
UN 3082 Environmentally hazardous substance, liquid, n.o.s. (mixture with Didecyldimethylammoniumchloride), 9, III, (E)

14.3 Transport hazard class(es):
Class(es): 9
Identification number of the hazard: 90

14.4 Packing group:
III

14.5 Environmental hazards:
environmentally hazardous

14.6 Special precautions for user:
Hazard characteristics: Risk to the aquatic environment and the sewerage system.
Additional guidance:

15 SECTION 15: Regulatory information:

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:
Water hazard class, WGK: 2
Volatile organic component (VOC): 11.500 %
Volatile organic component (VOC): 139.580 g/l
Composition by regulation (EC) 648/2004: Nonionic surfactants 15% - 30%, Cationic surfactants < 5%

15.2 Chemical Safety Assessment:
No data available

16 SECTION 16: Other information:

Legend to abbreviations used in the safety data sheet:
Legend to the R & H Phrases used in the safety data sheet:

H225 Flam. Liq. 2: Highly flammable liquid and vapour.  
H226 Flam. Liq. 3: Flammable liquid and vapour.  
H301 Acute tox. 3: Toxic if swallowed.  
H302 Acute tox. 4: Harmful if swallowed.  
H314 Skin Corr. 1B: Causes severe skin burns and eye damage.  
H315 Skin Irrit. 2: Causes skin irritation.  
H316 Skin Sens. 1: May cause an allergic skin reaction.  
H318 Eye Dam. 1: Causes serious eye damage.  
H319 Eye Irrit. 2: Causes serious eye irritation.  
H336 STOT SE 3: May cause drowsiness or dizziness.  
H400 Aquatic Acute 1: Very toxic to aquatic life.  
H410 Aquatic Chronic 1: Very toxic to aquatic life with long lasting effects.  
H411 Aquatic Chronic 2: Toxic to aquatic life with long lasting effects.

Reason of revision, changes of following items:

Section: 11

MSDS reference number:

ECM-5756,10

This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 2015/830. Classification has been calculated in accordance with European regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.