SAFETY DATA SHEET
Fomtec ARC 3x3


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

Date issued 04.01.2013
Revision date 17.04.2018

1.1. Product identifier
Product name Fomtec ARC 3x3
Article no. 12-3304-XX

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance / preparation Appliance protection.

1.3. Details of the supplier of the safety data sheet
Company name Dafo Fomtec AB
Office address Garnisonsg. 47 A, Helsingborg
Postal address Box 683
Postcode S-13526
City Tyresö
Country Sweden
Telephone number + 46 850640500
Email info@fomtec.com
Website http://www.fomtec.com/

1.4. Emergency telephone number
Emergency telephone Telephone number: +44 1273 289451
Description: NCEC CareChem24
Identification, comments Additional Emergency Phone Number in Section 16

SECTION 2: Hazards identification
2.1. Classification of substance or mixture

Classification according to Regulation (EC) No 1272/2008

[CLP / GHS]

Eye Irrit. 2; H319; Calculation method

2.2. Label elements

Hazard pictograms (CLP)

Composition on the label

Diethylene glycol monobutyl ether 5 - 10 %, Sulfuric acid, mono-C8-10-alkyl esters, sodium salts 0,1 -0,9 %, 1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts 1 -2,9

Signal word

Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash thoroughly after handling. P280 Wear protective gloves / protective clothing / eye protection / 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.

2.3. Other hazards

The product does not meet the criteria for PBT (persistent / bioaccumulative / toxic) or vPvB (very persistent / very bioaccumulative).

SECTION 3: Composition / information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Substance</th>
<th>Identification</th>
<th>Classification</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>CAS No.: 112-34-5 EC No.: 203-961-6 Index No.: 603-096-00-8</td>
<td>Eye Irrit. 2; H319;</td>
<td>5 - 10 %</td>
</tr>
<tr>
<td>Alkyl polyglycoside</td>
<td>CAS No.: 68515-73-1 EC No.: 500-220-1 REACH Reg. No.: 01-2119488530-36-XXXX</td>
<td>Eye Dam. 1; H318</td>
<td>1 - 2,9 %</td>
</tr>
<tr>
<td>Ethanediol</td>
<td>CAS No.: 107-21-1 EC No.: 203-473-3 Index No.: 603-027-00-1 REACH Reg. No.: 01-2119456816-28</td>
<td>Acute Tox. 4; H302</td>
<td>15 -19 %</td>
</tr>
<tr>
<td>Sulfuric acid, mono-C8-10-alkyl esters, sodium salts</td>
<td>CAS No.: 85338-42-7 EC No.: 286-718-7</td>
<td>Skin Irrit. 2; H315 Eye Dam. 1; H318</td>
<td>0,1 -0,9 %</td>
</tr>
<tr>
<td>1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,Ndimethyl-3-sulfo-,</td>
<td>EC No.: 939-455-3 REACH Reg. No.: 01-2119970722-34</td>
<td>Eye Dam. 1; H318 Aquatic Chronic 3; H412</td>
<td>1 -2,9</td>
</tr>
</tbody>
</table>
N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<table>
<thead>
<tr>
<th>General</th>
<th>Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Fresh air and rest. Get medical attention if any discomfort continues.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Remove contaminated clothing and launder thoroughly before re-use. Wash skin thoroughly with soap and water for several minutes. Get medical attention if any discomfort continues.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Remove any contact lenses and open eyelids widely. Contact physician immediately. Continue flushing during transport to hospital. Immediately rinse with plenty of lukewarm water for at least 5 minutes.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.</td>
</tr>
</tbody>
</table>

#### Recommended personal protective equipment for first aid responders

| Recommended personal protective equipment for first aid responders | No recommendation given. |

#### 4.2. Most important symptoms and effects, both acute and delayed

| General symptoms and effects | Causes eye irritation. After extensive contact, may cause irritation to skin. When ingested, can cause nausea, vomiting, dizziness, confusion, loss of consciousness. |

#### 4.3. Indication of any immediate medical attention and special treatment needed

<table>
<thead>
<tr>
<th>Medical treatment</th>
<th>Treat Symptomatically.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical monitoring for delayed effects</td>
<td>No recommendation given.</td>
</tr>
<tr>
<td>Separate first aid equipment</td>
<td>No recommendation given.</td>
</tr>
</tbody>
</table>

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

| Suitable extinguishing media | This product is not flammable. |

#### 5.2. Special hazards arising from the substance or mixture

<table>
<thead>
<tr>
<th>Fire and explosion hazards</th>
<th>None.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous combustion products</td>
<td>In case of fire, carbon monoxide and carbon dioxide may be released.</td>
</tr>
</tbody>
</table>

#### 5.3. Advice for firefighters

| Personal protective equipment | Use personal protective equipment as required. |
SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures
Ensure good ventilation.

Personal protection measures
Avoid contact with skin and eyes. Do not breathe vapour. For personal protection, see section 8.

6.2. Environmental precautions

Environmental precautionary measures
Prevent discharge of larger quantity to drain. Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

Clean up
Absorb in vermiculite, dry sand or earth and place into containers. Collect spills to suitable waste containers. Further handling of waste – see section 13.

6.4. Reference to other sections

Additional information
See Sections 8 and 13 for information concerning protective equipment and waste treatment methods.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling
Avoid contact with skin and eyes. Avoid inhalation of vapours. Wash hands before breaks and before smoking, eating or drinking. Wash hands and contaminated areas with water and soap after finished work. Container must be kept tightly closed. Wear protective equipment, see Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Storage
Keep cool in a well-ventilated space. Keep container tightly closed. Protect against direct sunlight.

7.3. Specific end use(s)

Specific use(s)
See EWC-code under Section 13.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>Identification</th>
<th>Value</th>
<th>TWA Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monobutyl ether</td>
<td>CAS No.: 112-34-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkyl polyglycoside</td>
<td>CAS No.: 68515-73-1</td>
<td>TWA (8h) : 20 ppm, vapour</td>
<td></td>
</tr>
<tr>
<td>Ethanediol</td>
<td>CAS No.: 107-21-1</td>
<td>TWA (8h) : 52 mg/m3, vapour</td>
<td></td>
</tr>
</tbody>
</table>
8.2. Exposure controls

Safety signs

Precautionary measures to prevent exposure

Appropriate engineering controls

An eye wash bottle must be available at the work site.

Eye / face protection

Suitable eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hand protection

Skin- / hand protection, long term contact

In cases of prolonged, repeated or extensive exposure, wear protective gloves.

Suitable gloves type

Rubber or plastic.

Skin protection

Suitable protective clothing

Use protective clothes in order to avoid skin contact.
Respiratory protection

Ensure good ventilation. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | Clear, yellowish liquid. |
| Colour         | Yellowish. |
| Odour          | Slight odour. |
| pH             | Status: In delivery state Value: 6,5 - 8,5 |
| Melting point / melting range | Comments: No information. |
| Freezing point | Value: -15 °C |
| Boiling point / boiling range | Comments: No information. |
| Flash point    | Comments: Not relevant. |
| Evaporation rate | Comments: No information. |
| Flammability (solid, gas) | Not relevant. |
| Explosion limit | Comments: Product is not explosive. |
| Vapour pressure | Comments: No information. |
| Vapour density | Comments: No information. |
| Specific gravity | Value: ~ 1,040 Method: Pycometer (g/ml) |
| Density        | Comments: No information. |
| Bulk density   | Comments: No information. |
| Solubility     | Comments: Soluble in water. |
| Partition coefficient: n-octanol/water | Comments: No information. |
| Spontaneous combustability | Comments: No information. |
| Decomposition temperature | Comments: No information. |
| Viscosity      | Value: ~ 2300 mPas Method: Brookfield DV |
| Explosive properties | Product is not explosive. |
| Oxidising properties | Does not meet the criteria for oxidising. |

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity
**10.2. Chemical stability**

Stability: Stable product under normal conditions of handling and storage.

**10.3. Possibility of hazardous reactions**

Possibility of hazardous reactions: Stable product under normal conditions of handling and storage.

**10.4. Conditions to avoid**

Conditions to avoid: Not known under normal conditions of handling and storage.

**10.5. Incompatible materials**

Materials to avoid: Alkali earth metals.

**10.6. Hazardous decomposition products**

Hazardous decomposition products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Substance</th>
<th>Type of toxicity</th>
<th>Effect tested</th>
<th>Route of exposure</th>
<th>Value</th>
<th>Animal test species</th>
<th>Test reference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alkyl polyglycoside</strong></td>
<td>Acute</td>
<td>LD50</td>
<td>Oral</td>
<td>&gt; 2000 mg/kg</td>
<td>Rat</td>
<td>OECD 401</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ethanediol</strong></td>
<td>Acute</td>
<td>LD50</td>
<td>Dermal</td>
<td>= 9530 mg/kg</td>
<td>Rabbit</td>
<td>OECD 423</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sulfuric acid, mono-C8-10-alkyl esters, sodium salts</strong></td>
<td>Acute</td>
<td>LC50</td>
<td>Oral</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other information regarding health hazards

Skin contact
In case of prolonged contact with skin, may cause irritation.

Eye contact
Causes serious eye irritation.

Ingestion
In case of ingestion of large quantities may cause nausea, vomiting, dizziness, confusion, loss of consciousness.

Sensitisation
No known chronic or acute health risks.

Mutagenicity
No known chronic or acute health risks.

Carcinogenicity, other information
No known chronic or acute health risks.

Reproductive toxicity
No known chronic or acute health risks.

Symptoms of exposure

In case of ingestion
Ingestion of large quantities may cause nausea, vomiting, dizziness, confusion, loss of consciousness.

In case of skin contact
After extensive contact, may cause irritation to skin.

In case of eye contact
Irritation of eyes and mucous membrane.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic, fish

<table>
<thead>
<tr>
<th>Substance</th>
<th>Value:</th>
<th>Test duration</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl polyglycoside</td>
<td>&gt; 4500 mg/l</td>
<td>96 h</td>
<td>Rainbow Trout</td>
</tr>
</tbody>
</table>

Substance

Acute aquatic, fish

<table>
<thead>
<tr>
<th>Substance</th>
<th>Value:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl polyglycoside</td>
<td>~ 20 mg/l</td>
</tr>
<tr>
<td>Substance</td>
<td>Acute aquatic, fish</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------</td>
</tr>
</tbody>
</table>
### 12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Substance</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkyl polyglycoside</td>
<td><strong>Value:</strong> ~ 100 %&lt;br&gt;<strong>Method:</strong> OCDE 301E&lt;br&gt;<strong>Test period:</strong> 28 days</td>
</tr>
<tr>
<td>Ethanediol</td>
<td><strong>Value:</strong> = 56 %&lt;br&gt;<strong>Method:</strong> degradation in 28 days OECD 301C&lt;br&gt;<strong>Comments:</strong> Not readily biodegradable.</td>
</tr>
<tr>
<td>Sulfuric acid, mono-C8-10-alkyl esters, sodium salts</td>
<td><strong>Value:</strong> &gt; 60 %&lt;br&gt;<strong>Method:</strong> OECD 301D&lt;br&gt;<strong>Comments:</strong> Readily biodegradable.&lt;br&gt;<strong>Test period:</strong> 10 day(s)</td>
</tr>
<tr>
<td>1-Propanaminium, N-(3-aminopropyl)-2-hydroxy-N,N-dimethyl-3-sulfo-, N-(C8-18(even numbered) acyl) derivs., hydroxides, inner salts</td>
<td><strong>Value:</strong> = 57 %&lt;br&gt;<strong>Method:</strong> OECD 306&lt;br&gt;<strong>Test period:</strong> = 28 day(s)</td>
</tr>
</tbody>
</table>

**Persistence and degradability, comments:** The product is expected to be biodegradable.

### 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>Bioconcentration factor (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanediol</td>
<td><strong>Value:</strong> = 10&lt;br&gt;<strong>Comments:</strong> No bioaccumulation expected.</td>
</tr>
</tbody>
</table>

**Bioaccumulative potential:** Is not expected to be bioaccumulable.

### 12.4. Mobility in soil

**Mobility:** The product contains substances, which are water soluble and may spread in water systems.

### 12.5. Results of PBT and vPvB assessment

**PBT assessment results:** Not Classified as PBT/vPvB by current EU criteria.

### 12.6. Other adverse effects

**Effect dose concentration:** EC50<br>**Exposure time:** = 48<br>**Species:** Daphina magna<br>**Comments:** Not hazardous for environment.

**Ecotoxicity:** The product is not environmentally hazardous to aquatic life.

**Aquatic, comments:** On basis of test data.
SECTION 13: Disposal considerations

13.1. Waste treatment methods
Specify the appropriate methods of disposal
EWC waste code
EU Regulations

Dispose of waste and residues in accordance with local authority requirements.
EWC waste code: 160305 organic wastes containing dangerous substances
Classified as hazardous waste: Yes

SECTION 14: Transport information

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Additional information

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

EEC-directive


National regulations
Deutschland Wassergefährdungsklasse (WGK): 1

Legislation and regulations

15.2. Chemical safety assessment

Chemical safety assessment performed
Yes

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes Serious eye damage.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]
Eye Irrit. 2; H319; Calculation method

Emergency Phone No
*Europe (English, Dutch, French, German, Italian, Spanish) +44 1273 289451
France (English, French) +33 1 72 11 00 03
Germany (English, German) +49 69 222 25285
Spain (English, Spanish) +34 91 114 2520
Italy (English, Italian) +39 02 3604 2884
Netherlands (English, Dutch) +31 10 713 8195
*Middle East (English, Arabic) +44 1273 289454
United States (English, French, Spanish) +1 866 928 0789
Canada (English, French) +1 800 579 7421
United States and Canada (English) +1 202 464 2554
Mexico (English, Spanish) +52 55 5004 8763
Brazil (Portuguese, Spanish, English) +55 11 3197 5891
Chile (English, Spanish) +56 2 2582 9336
Colombia (English, Spanish) +57 1 508 7337
Argentina (English, Spanish) +54 11 5984 3690
*East/South East Asia (English, Bahasa Malaysia, Hindi, Japanese, Korean, Mandarin, Tagalog) +65 3158 1412
China (English, Mandarin) +86 512 8090 3042
China (Mainland) (English, Mandarin) **+86 532 8388 9090
Japan (English, Japanese) +81 3 4578 9341
Malaysia (English, Malaysian) +60 3 6207 4347
India (English, Hindi) 000 800 100 7479
Philippines (English, Tagalog) +63 2 231 2149
South Korea (English, Korean) +82 2 3479 8401
<table>
<thead>
<tr>
<th>Last update date</th>
<th>18.07.2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>16</td>
</tr>
<tr>
<td>Comments</td>
<td>General update. No changes in the product classification. Update of legal references.</td>
</tr>
</tbody>
</table>