Kusuri Products Limited
www.kusuri.co.uk

SAFETY DATA SHEET
ANTI-BAC

Compilation date: 28/05/2015
Revision No: 1

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

1.1 Product identifier
- **Product name:** ANTI-BAC 100ml.
- **CAS number:** Ethanol 64-17-5, Methanol 67-56-1, Polyvinylpyrrolidone iodine 25655-41-8
- **Product code:** ANTB.

1.2. Relevant identified uses of the substance or mixture and uses advised against
- **Recommended use:** Aquatic fish medication for Koi Carp
- **Not recommended:** For any other species

1.3. Details of the supplier of the safety data sheet
- **Company name:** Kusuri Products Limited
  12 Wentworth Road
  Heathfield Industrial Estate
  Newton Abbot
  Devon
  TQ12 6TL
  United Kingdom
- **Tel:** +44 (0)1626 836600
- **Fax:** +44 (0)1626 836700
- **Email:** kay@kusuri.co.uk

1.4. Emergency telephone number
- **Emergency Tel:** +44 (0)1626 836600

Section 2: Hazards identification

2.1. Classification of the substance or mixture
- **Classification under CLP:** Flammable liquids, Category 3
- **Most important adverse effects:** Although the product is not classified as dangerous, we recommend you to take the safety advice given below.

2.2. Label elements
- **Hazard statements:** H226: Flammable liquid and vapour.
- **Signal word:** Warning
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Hazard pictograms: GH502: Flame

Precautionary statements: P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

2.3. Other hazards

PBT: This product is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: ETHANOL CAS no: 64-17-5
METHANOL CAS no: 67-56-1
POLYVINYL PYRROLIDONE IODINE CAS no: 25655-41-8

3.2. Mixtures

Hazardous components:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number/ EC Number</th>
<th>REACH Registration Number</th>
<th>%</th>
<th>CLP Hazard Category</th>
<th>H-Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5 200-578-6</td>
<td>01-2119457610-43</td>
<td>&gt;=20</td>
<td>Flammable liquids</td>
<td>H225</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-&gt;25</td>
<td>Category 2;</td>
<td></td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1 200-659-6</td>
<td>**</td>
<td>&gt;=1</td>
<td>Flammable Liquid</td>
<td>H225</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-&gt;2.5</td>
<td>Category 2 Acute</td>
<td>H301, H311,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Toxicity Category 3</td>
<td>H331,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>STOT SE Category 1</td>
<td>H370</td>
</tr>
<tr>
<td>Polyvinylpyrrolidone iodine</td>
<td>25655-41-8</td>
<td>**</td>
<td>&gt;=1</td>
<td>Eye irritation</td>
<td>H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-&gt;2.5</td>
<td>Category 2 Chronic</td>
<td>H411</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>aquatic toxicity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Category 2</td>
<td></td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.
Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash skin water or a suitable skin cleaner. Never use solvents or thinners.

Eye contact: If wearing contact lenses, remove them. Wash eyes with plenty of clean cool water for at least 10 minutes.

Ingestion: If accidentally ingested, rinse mouth, seek medical attention if symptoms occur.

Inhalation: Seek medical assistance if symptoms occur.

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

Eye contact: No symptoms known or expected.

Ingestion: No symptoms known or expected.

Inhalation: No symptoms known or expected.

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

Immediate / special treatment: Treat symptomatically.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used.

Do not use a direct stream of water to extinguish.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Fire Hazard; Keep away from heat and sources of ignition. Flash back possible over considerable distance. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Hazardous combustion products: Decomposition products may include the following materials: Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Oxides of phosphorus.

5.3. Advice for fire-fighters

Advice for fire-fighters: Use personal protective equipment. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Remove all sources of ignition. Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Do not allow contact with soil, surface or discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.
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6.4. Reference to other sections

Reference to other sections: See Section 1 for emergency contact information. For personal protection see section 8. See Section 13 for additional waste treatment information.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: For personal protection, see section 8. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep the product in original container.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area between 4°C to 20°C. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

7.3. Specific end use(s)

Specific end use(s): Aquatic fish medication for Koi Carp.
Caution: For recommended use only.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits:

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS- No</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>TWA</td>
<td>1,000 ppm 1,920 mg/m³</td>
<td>04-06-2005</td>
<td>UKCOSSTD</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>TWA</td>
<td>200 ppm 266 mg/m³</td>
<td>04-06-2005</td>
<td>UKCOSSTD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>250 ppm 333 mg/m³</td>
<td>04-06-2005</td>
<td>UKCOSSTD</td>
</tr>
</tbody>
</table>

8.1. DNEL/PNEC Values

DNEL / PNEC No data available.
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8.2. Exposure controls
- Engineering measures: N/A
- Respiratory protection: No special protective equipment required.
- Hand protection: No special protective equipment required.
- Eye protection: No special protective equipment required.
- Skin protection: No special protective equipment required.

Section 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties
- State: Liquid
- Colour: Brown
- Flash point/range°C: 32 °C closed cup

9.2. Other information
- Other information: No data available.

Section 10: Stability and reactivity
10.1. Reactivity
- Reactivity: No dangerous reaction known under conditions of normal use.

10.2. Chemical stability
- Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions
- Hazardous reactions: No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid
- Conditions to avoid: Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials
- Materials to avoid: None known.

10.6. Hazardous decomposition products
- Haz. decomp. products: No decomposition if used for the intended use.

Section 11: Toxicological information
11.1. Information on toxicological effects
- Information on likely routes of exposure: Inhalation, Eye contact, Skin contact
- Toxicity
  - Acute oral toxicity: Acute toxicity estimate : > 2,000 mg/kg
  - Acute inhalation toxicity: 4 h Acute toxicity estimate : > 20 mg/l
  - Acute dermal toxicity: Acute toxicity estimate : > 2,000 mg/kg
  - Skin corrosion/irritation: There is no data available for this product.
  - Serious eye damage/eye irritation: There is no data available for this product.
  - Respiratory or skin sensitization: There is no data available for this product.
  - Carcinogenicity: There is no data available for this product.
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Reproductive effects
Germ cell mutagenicity
Teratogenicity
STOT - single exposure
STOT - repeated exposure
Aspiration toxicity

There is no data available for this product.

Relevant hazards for substance:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL:</td>
<td></td>
<td>Based on test data</td>
</tr>
<tr>
<td>Acute oral toxicity</td>
<td>LD₅₀ (oral, rat)</td>
<td>10,470 mg/kg</td>
</tr>
<tr>
<td>Acute inhalation toxicity</td>
<td>LC₅₀ (rat) 4h</td>
<td>117 mg/l</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>LD₅₀ (rabbit)</td>
<td>15,800 mg/kg</td>
</tr>
<tr>
<td>POLYVINYLPYRROLIDONE:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute oral toxicity</td>
<td>LD₅₀ (rat)</td>
<td>8,800 mg/kg</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>LD₅₀ (rat)</td>
<td>&gt; 2,500 mg/kg</td>
</tr>
</tbody>
</table>

Symptoms / routes of exposure

Skin contact: No symptoms known or expected.
Eye contact: No symptoms known or expected.
Ingestion: No symptoms known or expected.
Inhalation: No symptoms known or expected.
Delayed / immediate effects: No symptoms known or expected.

Section 12: Ecological information

12.1. Toxicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethanol</td>
<td>LC₅₀ (fish)</td>
<td>11,000 mg/l (96 h)</td>
</tr>
<tr>
<td>Methanol</td>
<td>LC₅₀ (fish)</td>
<td>15,400 mg/l (96 h)</td>
</tr>
<tr>
<td>Toxicity to daphnia and other aquatic invertebrates</td>
<td>EC₅₀</td>
<td>&gt; 10,000 mg/l (48h)</td>
</tr>
<tr>
<td>Methanol</td>
<td>EC₅₀</td>
<td>22,000 mg/l (72hr)</td>
</tr>
</tbody>
</table>

Ecotoxicity values: This product has no known ecotoxicological effects.
### Section 12: Environmental information

#### 12.2. Persistence and degradability
**Persistence and degradability**: No data available.

#### 12.3. Bioaccumulative potential
**Bioaccumulative potential**: No data available.

#### 12.4. Mobility in soil
**Mobility in soil**: No data available.

#### 12.5. Results of PBT and vPvB assessment
- **PBT**: This substance/mixture contains no components considered to be either persistent bioaccumulative and toxic (PBT).
- **vPvB**: This substance/mixture contains no components considered to be very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6. Other adverse effects
**Other adverse effects**: None.

### Section 13: Disposal considerations

#### 13.1. Waste treatment methods
**Disposal operations**: Contact your local waste disposal authority for advice. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

**NB**: The user’s attention is drawn to the possible existence of regional or national regulations regarding disposal.

### Section 14: Transport information

#### 14.1. UN number
**UN number**: 1170

#### 14.2. UN proper shipping name
**Shipping name**: ETHANOL SOLUTION

#### 14.3. Transport hazard class(es)
**Transport class**: 3

#### 14.4. Packing group
**Packing group**: III

#### 14.5. Environmental hazards
**Environmentally hazardous**: No  
**Marine pollutant**: No

#### 14.6. Special precautions for user
**Special precautions**: No special precautions

### Section 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- **Manufacturers licence No**: SAM0002 under VMD regulations.
- **COSHH**: Control of Substances Hazardous to Health (COSHH) Regulations 2002
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H.S.E. Guidance Note EH40 (Occupational Exposure Limits).
Manual Handling Operations Regulations 1992

Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and
Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the
Council of 16 December 2008 on classification, labelling and packaging of substances and
mixtures (as amended).
Commission Decision 2000/532/EC as amended by Decision 2001/118/EC
establishing a list of wastes and hazardous waste pursuant to Council
waste with amendments.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the
substance or the mixture by the supplier.

Section 16: Other information

Other information: This safety data sheet is prepared in accordance with Commission

Legal disclaimer: The above information is believed to be correct but does not purport to be
all inclusive and shall be used only as a guide. This company shall not be
held liable for any damage resulting from handling or from contact with the
above product.

Abbreviations and acronyms: $LC_{50}$: Lethal concentration, 50 percent
$LD_{50}$: Lethal dose, 50 percent
$EC_{50}$: Effective concentration, 50 percent