SAFETY DATA SHEET
Sani-Hands ALC Antimicrobial Alcohol Gel Hand Wipes

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

Date issued 03.05.2011

1.1. Product identifier

Product name Sani-Hands ALC Antimicrobial Alcohol Gel Hand Wipes
Product group Biocide
Use of the substance/preparation Disinfectant hand wipes

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

Uses advised against It is not advised against any identified use.

1.3. Details of the supplier of the safety data sheet

Downstream user

Company name Laerdal Medical AS
Postal address Tanke Svilandsg 30
Postcode 4002
Place name Stavanger
Country Norway
Tel +4751511700
Fax +4751523557
E-mail MelindaKay.Christensen@laerdal.no
Website http://www.laerdal.no
Name of contact Melinda Kay Christensen

1.4. Emergency telephone number

Emergency telephone Norwegian Poison Information Centre: 22 59 13 00

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC R10

2.2. Label elements

R phrases R10 Flammable.
S phrases S16 Keep away from sources of ignition - No smoking.

2.3. Other hazards

Description of hazard
Health: The product is not classified as hazardous to health.

Fire and explosion: The product is classified as flammable.

Environment: The product is not classified as harmful to the environment.

Other hazards See sections 5, 11 and 12 for complementary information.
### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<table>
<thead>
<tr>
<th>Component name</th>
<th>Identification</th>
<th>Classification</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>CAS no.: 64-17-5 EC no.: 200-578-6 Index no.: 603-002-00-5</td>
<td>F; R11</td>
<td>60 - 80 %</td>
</tr>
</tbody>
</table>

**Column headings**
- CAS no. = Chemical Abstracts Service; EU (Einecs or Elincs number) = European inventory of Existing Commercial Chemical Substances; Ingredient name = Name as specified in the substance list (substances that are not included in the substance list must be translated, if possible). Contents given in: %, %wt/wt, %vol/wt, %vol/vol, mg/m3, ppb, ppm, weight%, vol%
- HH/HF/HE: T+ = Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritating, E = Explosive, O = Oxidizing, F+ = Extremely flammable, F = Very flammable, N = Environmental hazard

**Description of the mixture**
Contains a potential mutagen.

**Component comments**
The remaining ingredients up to 100 % consist of non-classified components or of components in concentrations below the limit to be included in the calculation of hazard class. See section 16 for explanation of Risk-phrases listed above.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- **General**
  If in doubt, seek medical advice.

- **Inhalation**
  Fresh air and rest. Get medical attention if any discomfort continues.

- **Skin contact**
  The product is a hand disinfectant. Rinse with water. Then apply a fatty cream. Get medical attention if any discomfort continues.

- **Eye contact**
  Remove any contact lenses. Hold the eyelids apart. Promptly rinse eyes with plenty of water (tempered at 20-30°C) for at least 15 minutes. Contact physician if discomfort continues.

- **Ingestion**
  Rinse mouth thoroughly. Induce vomiting, if person is conscious. Seek medical attention.

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

- **Information for health personnel**
  Symptomatic treatment.

- **Acute symptoms and effects**
  None known

- **Delayed symptoms and effects**
  Solvent vapors may be harmful. Overexposure can cause headache, nausea, vomiting, and symptoms of intoxication.

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

- **Other Information**
  No specific treatment required, see section 4.1.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- **Suitable extinguishing media**
  Dry-powder, Carbon dioxide (CO2), alcohol-resistant foam.

- **Improper extinguishing media**
  Do not use water jet.

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

- **Fire and explosion hazards**
  Flammable.

- **Hazardous combustion products**
  Carbon monoxide (CO). Carbon dioxide (CO2).

#### 5.3. Advice for firefighters

- **Personal protective equipment**
  Use fresh air equipment when the product is involved in fire. In case of evacuation, an approved protection mask should be used. See also sect. 8.

- **Other Information**
  Containers close to fire should be removed immediately or cooled with water.

### SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures

General measures
Remove all sources of ignition. Provide adequate ventilation.

Personal precautions
Use protective equipment as referred to in section 8.

6.1.1. For non-emergency personnel

6.1.2. For emergency responders

6.2. Environmental precautions

Environmental precautions
Do not allow to enter into sewer, water system or soil.

6.3. Methods and material for containment and cleaning up

Methods for cleaning
Use mechanical handling equipment. Collect in a suitable container and
dispose as hazardous waste according to section 13.

6.4. Reference to other sections

Other instructions
See also sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling
Provide good ventilation. Do not eat, drink or smoke when using the product.

Protective Measures

7.2. Conditions for safe storage, including any incompatibilities

Storage
Store dry in a well-ventilated place. Store in original packaging.

7.3. Specific end use(s)

Recommendations
No other use has been identified requiring measures to ensure safe use
beyond those specified in other parts of the SDS.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure controls

Exposure limit values

<table>
<thead>
<tr>
<th>Component name</th>
<th>Identification</th>
<th>Value</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>CAS no.: 64-17-5</td>
<td>8 h.: 500 ppm</td>
<td>2007</td>
</tr>
<tr>
<td></td>
<td>EC no.: 200-578-6</td>
<td>8 h.: 950 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Index no.: 603-002-00-5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exposure limits

Biological limits

DNEL / PNEC

Precautionary measures to prevent exposure

Appropriate environmental exposure control

8.2. Exposure controls

Occupational exposure controls
Provide adequate ventilation. Do not eat, drink or smoke during work.
Personal protection equipment should be chosen according to the CEN
standards and in discussion with the supplier of the personal protective
equipment

Eye / face protection

Eye protection
Normally not necessary. Wear safety goggles if there is a risk of splash.

Skin protection

Hand protection
Normally not required. The product is intended for skin contact.

Additional skin protection measures
Apply a fatty cream after use.

Respiratory protection

Respiratory protection
Normally not required. If there is insufficient ventilation, use a respirator with
**Thermal hazards**

Eye wash facilities should be available when handling this product. The listed protective equipment is a recommendation. A risk assessment of the actual risk may lead to other requirements.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Moistened tissue.</td>
</tr>
<tr>
<td>Odour</td>
<td>Alcohol.</td>
</tr>
<tr>
<td>Colour</td>
<td>Clear Colourless wipe</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Insoluble.</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>Value: 0.893 g/cm³ Comments: Liquid</td>
</tr>
<tr>
<td>Melting point/melting range</td>
<td>Comments: Not known.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Comments: Not known.</td>
</tr>
<tr>
<td>pH (as supplied)</td>
<td>Comments: Not known.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Value: 23.33 °C Comments: Liquid</td>
</tr>
<tr>
<td>Explosion limit</td>
<td>Comments: Not known.</td>
</tr>
<tr>
<td>Spontaneous combustibility</td>
<td>Comments: Not known.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not known.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Comments: Not known.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Comments: Not known.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Comments: Not known.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Comments: Not known.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Comments: Not known.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Comments: Not known.</td>
</tr>
</tbody>
</table>

#### 9.2. Other information

**Other physical and chemical properties**

Comments: The liquid in the wet wipe is a volatile substance.

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reactivity: See section: 10.2 - 10.6

#### 10.2. Chemical stability

Stability: Stable under normal temperature conditions and recommended use.

#### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions: No hazardous reactions known.

#### 10.4. Conditions to avoid

Conditions to avoid: High temperature. Do not mix with other chemicals.

#### 10.5. Incompatible materials


#### 10.6. Hazardous decomposition products

Hazardous decomposition products: Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO₂).

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### SECTION 11: Toxicological information

**Toxicological Information:**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral</td>
<td>Value: 3450 mg/kg Test animal species: Mouse</td>
</tr>
</tbody>
</table>
Ethanol

**LD50 oral**
- **Value:** 1501 mg/kg
- **Test animal species:** Rat
- **Comments:** Ethanol

**LC50 inhalation**
- **Value:** 31623 ppm
- **Test animal species:** Rat
- **Comments:** Ethanol

**Other information regarding health hazards**

**General**
- Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

**Inhalation**
- Vapours may irritate throat and respiratory system and cause coughing.
- Solvent vapours are hazardous and may cause nausea, sickness and headaches.

**Skin contact**
- The product is intended for skin contact. Prolonged and repeated contact can cause drying of the skin.

**Eye contact**
- May irritate and cause redness and pain.

**Ingestion**
- Not likely, due to the form of the product. The product can, however, irritate and cause abdominal pain, vomiting and diarrhea.

**Chronic effects**
- Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

**Sensitisation**
- Sensitizing properties are not known.

**Carcinogenicity**
- Carcinogenic properties are not known.

**Teratogenic properties**
- Mutagenic effects were observed in somatic and reproductive cells of live animals (rats and mice) exposed to high oral doses of ethanol.

**Reproductive toxicity**
- Effects harmful to reproduction are not known.

**SECTION 12: Ecological information**

**12.1. Toxicity**

**Toxicological Information:**

**Acute aquatic, fish**
- **Value:** 12900 mg/L
- **Method of testing:** LC50 for ethanol
- **Fish, species:** Oncorhynchus mykiss
- **Duration:** 96 hr.

**Acute aquatic, Daphnia**
- **Value:** 9268 mg/L
- **Method of testing:** EC50 for ethanol
- **Daphnia, species:** Daphnia magna
- **Duration:** 48 hr.

**Aquatic, comments**
- 5 min EC50 Photobacterium phosphoreum: 35470 mg/L
- 30 min EC50 Photobacterium phosphoreum: 34634 mg/L

**Other ecological information**

**Ecotoxicity**
- The product is not classified as dangerous for the environment.

**12.2. Persistence and degradability**

**Persistence and degradability**
- The product is not readily biodegradable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential**
- The product does not contain any substances expected to be bioaccumulating.

**12.4. Mobility in soil**

**Mobility**
- Insoluble or slightly soluble in water.

**12.5. Results of PBT and vPvB assessment**

**PBT assessment results**
- Not known.

**12.6. Other adverse effects**

**Other adverse effects / Remarks**
- None known.
SECTION 13: Disposal considerations

EWC waste code
EWC: 07 07 04 other organicsolvents, washing liquids and mother liquors
NORSAS
7042 Organic solvents, non-halogenated
Product classified as hazardous waste
Yes

13.1. Waste treatment methods
Specify the appropriate methods of disposal
Disposed of as hazardous waste by approved contractor. The waste code (EWC-Code) is intended as a guide. The code must be chosen by the user, if the use differs from the one mentioned above.

SECTION 14: Transport information

Proper Shipping Name
SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (ETHANOL)
Product name (national)
SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (ETHANOL)
Dangerous goods ADR
UN no.: 3175
Class: 4.1
Hazard no.: 40
Packing group: II
Proper shipping name: SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (ETHANOL)
Dangerous goods RID
Status: Yes
UN no.: 3175
Class: 4.1
Packing group: II
Proper shipping name: SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (ETHANOL)
Dangerous goods IMDG
UN no.: 3175
Class: 4.1
Packing group: II
EmS: F-A, S-I
Proper shipping name: SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (ETHANOL)
Dangerous goods ICAO/IATA
UN no.: 3175
Class: 4.1
Packing group: II
Proper shipping name: SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (ETHANOL)

14.6. Special precautions for user
Special precautions for user
Not known.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Other applicable information.
Not known.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
References (laws/regulations)
Norwegian regulation on classification and labelling of dangerous chemicals. Valid from June 21, 2010.
Administrative norms for pollution of the atmosphere, from Norwegian labour inspection authority.
Dangerous Goods regulations (ADR/RID 2011)
The Safety Data Sheet is based on information provided by the producer.

### 15.2. Chemical safety assessment

Chemical safety assessment has been carried out No

### SECTION 16: Other information

| List of relevant R phrases (under headings 2 and 3). | R10 Flammable. |
| Further information | PBT: Persistent, Bioaccumulative and Toxic |
|                     | vPvB: very Persistent and very Bioaccumulative |
| Sources of key data used to compile the safety data sheet | Suppliers Safety data sheet dated: 29.11.2007 |
| Information which has been added, deleted or revised | New Safety Data Sheet. |
| Supplier's notes | The information contained in this SDS must be made available to all those who handle the product. |
| Checking quality of information | This SDS is quality controlled by National Institute of Technology in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2008. |
| Responsible for safety data sheet | Laerdal Medical AS |
| Prepared by | National Institute of Technology as, Norway by Stine Bækkelund |