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

1.1. Product identifier
- Product form: Mixture
- Product name: Alcohol Hand Sanitizer Gel
- Product group: Trade product
- Product code: LB-4000
- Part number: TR-BR40 series

1.2. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses
- Use of the substance/preparation: Hand sanitizing

1.2.2. Uses advised against
- No data available

1.3. Details of the supplier of the safety data sheet
Celeste Industries Corporation
8221 Teal Drive, suite 405
Easton, Maryland 21601 (USA)
Within USA: (410) 822-5775
International: 00 (1) 410-822-5775
e-mail: info@celestecorp.com

1.4. Emergency telephone number
- Emergency contact number: For Chemical Emergency, Spill, Leak, Fire, Exposure or Accident call CHEMTREC (24 hours) within USA and CANADA: 1-800-424-9300
  Outside USA and Canada (collect call accepted): 1-703-527-3883

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
- Classification according to Regulation (EC) No. 1272/2008 [CLP]
  Not classified
- Classification according to Directive 67/548/EEC or 1999/45/EC
  Not classified

Adverse physicochemical, human health and environmental effects
- No additional information available.

2.2. Label elements
- Classification according to CLP Regulation (EC) No 1272/2008
  No labelling applicable

2.3. Other hazards
- This substance/mixture does not meet the PBT criteria of REACH, annex XIII.
- This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.1. Substances
- Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>(CAS No.) 64-17-5</td>
<td>&gt;50</td>
<td>Flam. Liq. 2, H225 Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>(EC no) 200-578-6</td>
<td></td>
<td>(EC index no) 603-002-00-5</td>
<td></td>
</tr>
</tbody>
</table>

Full text of R-, H- and EUH-phrases: see section 16.
### SECTION 4: First aid measures

4.1. **Description of first aid measures**

<table>
<thead>
<tr>
<th>First-aid measures after inhalation</th>
<th>If respiratory irritation occurs upon inhalation, remove to fresh air. Seek medical attention if symptoms develop or persist.</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-aid measures after skin contact</td>
<td>When symptoms occur: rinse immediately with plenty of water.</td>
</tr>
<tr>
<td>First-aid measures after eye contact</td>
<td>Immediately flush eyes thoroughly with water for at least 15 minutes.</td>
</tr>
<tr>
<td>First-aid measures after ingestion</td>
<td>Seek medical attention immediately. If the person is fully conscious, make him/her drink water. Never give an unconscious person anything to drink. Do not induce vomiting.</td>
</tr>
</tbody>
</table>

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

| Symptoms/injuries after skin contact | Intended for hand use without causing irritation but if contacts other skin areas that may become irritated. |
| Symptoms/injuries after eye contact | May cause irritation to the eyes. |
| Symptoms/injuries after ingestion | May cause chronic nasal passage, throat, or lung irritation if breathed over a prolonged period of time in the form of a mist. |

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

Treat symptomatically.

### SECTION 5: Firefighting measures

5.1. **Extinguishing media**

Suitable extinguishing media: Dry chemical powder. Water spray. Alcohol resistant foam.

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

Fire hazard: Contains flammable ingredients. Non-flammable liquid, according to Annex VI of Directive 67/548/EEC, mixture having a flash point greater than 21°C and less than 55°C need not be classified as flammable if the mixture could not in any way support combustion. On combustion forms: Toxic gases, carbon oxides (CO and CO2).

5.3. **Advice for firefighters**

Protective equipment for firefighters: Extra personal protection: complete protective clothing including self-contained breathing apparatus.

### SECTION 6: Accidental release measures

6.1. **Personal precautions, protective equipment and emergency procedures**

6.1.1. **For non-emergency personnel**

Protective equipment: Chemical resistant gloves. Use splash goggles when eye contact due to splashing is possible.

Emergency procedures: Eliminate all ignition sources if safe to do so. Ventilate affected area. Avoid contact with skin and eyes.

6.1.2. **For emergency responders**

Protective equipment: Chemical resistant gloves. Use splash goggles when eye contact due to splashing is possible.

Emergency procedures: Eliminate all ignition sources if safe to do so. Ventilate affected area. Avoid contact with skin and eyes.

6.2. **Environmental precautions**

No additional information available

6.3. **Methods and material for containment and cleaning up**

Methods for cleaning up: Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, dike with dirt, then remove by vacuum truck for disposal.

6.4. **Reference to other sections**

Refer to sections 8 and 13.

### SECTION 7: Handling and storage

7.1. **Precautions for safe handling**

Precautions for safe handling: Avoid contact with eyes. Avoid breathing mist or vapor. Keep away from any source of heat, ignition, open flame-NO SMOKING.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

7.2. **Conditions for safe storage, including any incompatibilities**

Technical measures: Provide adequate ventilation.

Storage condition(s): Store in dry, cool, well-ventilated area.

7.3. **Specific end use(s)**

No data available
### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<table>
<thead>
<tr>
<th>Ethanol (64-17-5)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>MAK (mg/m³)</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td>Austria</td>
<td>MAK (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Austria</td>
<td>MAK Short time value (mg/m³)</td>
<td>3800 mg/m³</td>
</tr>
<tr>
<td>Belgium</td>
<td>Limit value (mg/m³)</td>
<td>1907 mg/m³</td>
</tr>
<tr>
<td>Belgium</td>
<td>Limit value (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>France</td>
<td>VLE (mg/m³)</td>
<td>9500 mg/m³</td>
</tr>
<tr>
<td>France</td>
<td>VLE (ppm)</td>
<td>5000 ppm</td>
</tr>
<tr>
<td>France</td>
<td>VME (mg/m³)</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td>France</td>
<td>VME (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Germany</td>
<td>TRGS 900 Occupational exposure limit value (mg/m³)</td>
<td>960 mg/m³</td>
</tr>
<tr>
<td>Germany</td>
<td>TRGS 900 Occupational exposure limit value (ppm)</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Germany</td>
<td>TRGS 900 Occupational exposure limit value (pk)</td>
<td>500 ppm</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
<td>1884 mg/m³</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
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<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (ppm)</td>
<td>1000 ppm</td>
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<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-ED (mg/m³)</td>
<td>1910 mg/m³</td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-ED (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Switzerland</td>
<td>VLE (mg/m³)</td>
<td>1920 mg/m³</td>
</tr>
<tr>
<td>Switzerland</td>
<td>VLE (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Switzerland</td>
<td>VME (mg/m³)</td>
<td>960 mg/m³</td>
</tr>
<tr>
<td>Switzerland</td>
<td>VME (ppm)</td>
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</tr>
<tr>
<td>United Kingdom</td>
<td>WEL TWA (mg/m³)</td>
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</tr>
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<td>United Kingdom</td>
<td>WEL TWA (ppm)</td>
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<td>Expoziční limity (PEL) (ppm)</td>
<td>530 ppm</td>
</tr>
<tr>
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<td>Expoziční limity (NPK-P) (mg/m³)</td>
<td>3000 mg/m³</td>
</tr>
<tr>
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</tr>
<tr>
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<td>1900 mg/m³</td>
</tr>
<tr>
<td>Denmark</td>
<td>Grænseværdie (langvarig) (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Denmark</td>
<td>Grænseværdie (kortvarig) (mg/m³)</td>
<td>3800 mg/m³</td>
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<tr>
<td>Denmark</td>
<td>Grænseværdie (kortvarig) (ppm)</td>
<td>2000 ppm</td>
</tr>
<tr>
<td>Finland</td>
<td>HTP-arvo (8h) (mg/m³)</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td>Finland</td>
<td>HTP-arvo (8h) (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Finland</td>
<td>HTP-arvo (15 min) (mg/m³)</td>
<td>2500 mg/m³</td>
</tr>
<tr>
<td>Finland</td>
<td>HTP-arvo (15 min) (ppm)</td>
<td>1300 ppm</td>
</tr>
<tr>
<td>Hungary</td>
<td>AK-érték</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td>Hungary</td>
<td>CK-érték</td>
<td>7600 mg/m³</td>
</tr>
<tr>
<td>Ireland</td>
<td>OEL (8 hours ref) (mg/m³)</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td>Ireland</td>
<td>OEL (8 hours ref) (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Lithuania</td>
<td>IPRV (mg/m³)</td>
<td>1000 mg/m³</td>
</tr>
<tr>
<td>Lithuania</td>
<td>IPRV (ppm)</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Lithuania</td>
<td>TPRV (mg/m³)</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td>Lithuania</td>
<td>TPRV (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Lithuania</td>
<td>NRV (mg/m³)</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td>Lithuania</td>
<td>NRV (ppm)</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Norway</td>
<td>Gjennomsnittsverdier (AN) (mg/m³)</td>
<td>950 mg/m³</td>
</tr>
<tr>
<td>Norway</td>
<td>Gjennomsnittsverdier (AN) (ppm)</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Poland</td>
<td>NDS (mg/m³)</td>
<td>1900 mg/m³</td>
</tr>
</tbody>
</table>
**Ethanol (64-17-5)**

<table>
<thead>
<tr>
<th>Country</th>
<th>NPHV (priemerná) (mg/m³)</th>
<th>Upozornenie (SK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovakia</td>
<td>960 mg/m³</td>
<td>krátkodobý kategória II.</td>
</tr>
<tr>
<td>Slovakia</td>
<td>500 ppm</td>
<td></td>
</tr>
<tr>
<td>Canada (Quebec)</td>
<td>1880 mg/m³</td>
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</tr>
<tr>
<td>Canada (Quebec)</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>1920 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>1000 ppm</td>
<td></td>
</tr>
</tbody>
</table>

**HAND SANITIZER GEL**

**DNEL/DMEL (Workers)**

<table>
<thead>
<tr>
<th>Effect Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute - systemic effects, inhalation</td>
<td>950 mg/m³</td>
</tr>
<tr>
<td>Long-term - systemic effects, dermal</td>
<td>343 mg/kg bodyweight/day</td>
</tr>
<tr>
<td>Long-term - systemic effects, inhalation</td>
<td>1900 mg/m³/day</td>
</tr>
</tbody>
</table>

**DNEL/DMEL (General population)**

<table>
<thead>
<tr>
<th>Effect Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute - systemic effects, inhalation</td>
<td>950 mg/m³</td>
</tr>
<tr>
<td>Long-term - systemic effects, oral</td>
<td>87 mg/kg bodyweight/day</td>
</tr>
<tr>
<td>Long-term - systemic effects, inhalation</td>
<td>114 mg/m³/day</td>
</tr>
<tr>
<td>Long-term - systemic effects, dermal</td>
<td>206 mg/kg bodyweight/day</td>
</tr>
</tbody>
</table>

**8.2. Exposure controls**

- **Appropriate engineering controls**: Ensure adequate ventilation.
- **Personal protective equipment**: Normally not required when used as intended.
- **Hand protection**: Product is designed for use on hands.
- **Eye protection**: Normally not required if used as intended.
- **Skin and body protection**: Normally not required if used as intended.
- **Respiratory protection**: Normally not required if used as intended.

**SECTION 9: Physical and chemical properties**

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

- **Physical state**: Liquid
- **Appearance**: Clear gel
- **Colour**: Colourless
- **Odour**: Citrus
- **Odour threshold**: No data available
- **pH**: No data available
- **Melting point**: No data available
- **Solidification point**: No data available
- **Boiling point**: No data available
- **Flash point**: 22.2 °C
- **Relative evaporation rate (butylacetate=1)**: 2.7
- **Flammability (solid, gas)**: No data available
- **Explosive limits**: No data available
- **Vapour pressure**: No data available
- **Relative vapour density at 20 °C**: No data available
- **Relative density**: 0.89 g/cm³
- **Log Pow**: No data available
- **Log Kow**: No data available
- **Self ignition temperature**: No data available
- **Decomposition temperature**: No data available
- **Viscosity, kinematic**: No data available
- **Viscosity, dynamic**: No data available
- **Explosive properties**: No data available
- **Oxidising properties**: No data available

**9.2. Other information**

No data available
SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions of use.

10.2. Chemical stability
Stable under normal conditions of use.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
No data available

10.5. Incompatible materials
Strong oxidizing agents, strong reducing agents

10.6. Hazardous decomposition products
None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

Ethanol (64-17-5)

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>10470 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>15800 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 51 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified (according to Directive 67/548 EEC and 1999/45/EC)

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified (No classification for mutagenicity as none of the components is classified for mutagenicity)

Carcinogenicity : Not classified (No classification for carcinogenicity as none of the components is classified for carcinogenicity)

Reproductive toxicity : Not classified (No classification for reproduction as none of the components is toxic for reproduction)

Specific target organ toxicity (single exposure) : Not classified (None of the components shows specific effects in acute toxicity studies requiring classification for Specific Target Organ Systemic Toxicity single exposure)

Specific target organ toxicity (repeated exposure) : Not classified (None of the components shows specific effects in acute toxicity studies requiring classification for Specific Target Organ Systemic Toxicity repeated exposure)

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity
No additional information available

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment

**FOAMING ALCOHOL HAND SANITIZER**

This substance/mixture does not meet the PBT criteria of REACH, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Regional legislation (waste) : Dispose of contents/container to comply with applicable local, national and international regulations.
Waste disposal recommendations: Comply with local regulations for disposal.

SECTION 14: Transport information

In accordance with DOT/ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. Domestic (USA) DOT Shipping Regulation

Limited quantities may be shipped as ORM-D, Consumer Commodity, in accordance with 49CFR (HMR 181), 173.150 and 173.156

HAZMAT MARKING:
Domestic(US): Ethyl alcohol solutions, 3, UN1170, PG II

14.1. UN number
UN-No. : 1170

14.2. UN proper shipping name
Proper shipping name : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Transport document description : UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II, (D/E)

14.3. Transport hazard class(es)
Class (UN) : 3
Hazard labels (UN) : 3

14.4. Packing group
Packing group (UN) : II

14.5. Environmental hazards
Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport
Hazard identification number (Kemler No.) : 33
Classification code : F1
Orange plates :

Tunnel restriction code : D/E
Limited quantities (ADR) : LQ04
Excepted quantities (ADR) : E2
EAC code : •2YE

14.6.2. Transport by sea
No additional information available

14.6.3. Air transport
No additional information available

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

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations
Contains no REACH candidate substance

15.1.2. National regulations
No data available
15.2. Chemical safety assessment

CSA has not been established

SECTION 16: Other information

Sources of Key data: SDS, ECHA.

Abbreviations and acronyms:
- ACGIH (American Conference of Government Industrial Hygienists)
- ASTM - American Society for Testing and Materials
- CAS - Chemical Abstracts Service
- CLP - Classification, Labelling and Packaging
- CSR - Chemical Safety Report
- EEC - European Economic Community
- EC - European Community
- GHS - Globally Harmonised System
- HMIS - Hazardous Materials Identification System
- MSDS - Material Safety Data Sheet
- OSHA - Occupational Safety and Health Administration
- ADR - Overland transport
- PEL - Permissible Exposure Level
- REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals
- Relative
- SDS - Safety Data Sheet
- STEL - Short-Term Exposure Limit
- TLV - Threshold Limit Value
- TWA - Time Weighted Average

Full text of R-, H- and EUH-phrases:

<table>
<thead>
<tr>
<th>Flam. Liq. 2</th>
<th>Flammable liquids Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2</td>
<td>Eye Irritant, Category 2</td>
</tr>
<tr>
<td>H225</td>
<td>Flammable liquid and vapour</td>
</tr>
<tr>
<td>H319</td>
<td>Causes eye irritation</td>
</tr>
</tbody>
</table>

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