1 Identification

- **Product name:** EP66 Disinfectant and Sanitizer
- **Other means of identification (Article number):** 1997
- **DIN:** 02271753
- **Recommended use:** Disinfectant hard surfaces
- **Restrictions on use:** All other uses than those indicated on the product label and technical data sheet
- **Uses advised against** All other uses than those indicated on the product label and technical data sheet.
- **Manufacturer:**
  Avmor LTD
  950, Michelin
  Laval, QC, H7L 5C1
  Canada
  1-800-387-8074
  www.avmor.com
- **Emergency telephone number:** CANUTEC 1-613-996-6666

2 Hazard identification

- **Classification of the product as sold:**
  - Skin Corr. 1C  H314  Causes severe skin burns and eye damage.
  - Eye Dam. 1  H318  Causes serious eye damage.
- **Additional information:**
  This product is registered as a drug according to the Food and Drugs Act (R.S.C., 1985, c. F-27). It is not regulated under the Hazardous Products Act (R.S.C., 1985, ch. H-3). The following information is provided to our customers for their training and safety programs.

- **Label elements**
  - **Hazard pictograms:**

  ![GHS05](image)

- **Signal word:** Danger
- **Hazard statements:**
  Causes severe skin burns and eye damage.
- **Precautionary statements:**
  - Do not breathe mist, vapours and spray.
  - Wash thoroughly after handling.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
  - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
  - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Product name: EP66 Disinfectant and Sanitizer

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center/doctor.
Specific treatment (see on this label).
Dispose of contents and container in accordance with local, regional and national regulations.

Classification system
NFPA ratings (scale 0 - 4):

Health = 2
Fire = 0
Reactivity = 0

Hazard not otherwise classified: None Known
Notes: For the wording of the listed abbreviations refer to section 16.

Product AT USE DILUTION: N/A

3 Composition/Information on ingredients

Chemical characterization: Mixtures
Description: Aqueous mixture consisting of the following components:

Components:

<table>
<thead>
<tr>
<th>Component ID</th>
<th>Chemical Name</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>68391-01-5</td>
<td>Alkyl (C12-C18) Dimethyl Benzyl Ammonium Chloride</td>
<td>3-7% *</td>
</tr>
<tr>
<td>85409-23-0</td>
<td>Alkyl (C12, C14) Dimethyl Ethylbenzyl Ammonium Chloride</td>
<td>3-7% *</td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethanol</td>
<td>0.5-1.5% *</td>
</tr>
</tbody>
</table>

* Actual concentration ranges are withheld as a trade secret.
Additional information: Any concentration shown as a range is to protect confidentiality or is due to batch variation.

4 First aid measures

Description of first aid measures
After inhalation:
In case of unconsciousness place patient stably in side position for transportation. Get medical attention.
After skin contact:
Remove immediately all contaminated clothing. Rinse skin with water or shower for at least 15 minutes. Consult a doctor if skin redness and irritation persist.
After eye contact:
Rinse opened eye for several minutes under running water. Remove contact lenses, if present and easy to do so. Continue rinsing for a minimum of 15 to 60 minutes. Then consult a doctor.
After ingestion:
Drink copious amounts of water and provide fresh air. Immediately call a doctor. Do not induce vomiting.
Most important symptoms and effects, both acute and delayed: No further relevant information available.

5 Firefighting measures

Suitable extinguishing media:
CO2, extinguishing powder or water spray. Fight larger fires with water spray.
Use fire fighting measures that suit the environment.
Specific hazards arising from the product: During heating or in case of fire poisonous gases are produced.
Special protective equipment and precautions for fire-fighters:
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Product name: EP66 Disinfectant and Sanitizer

- Additional information: This product is not flammable.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
  Mount respiratory protective device.
  Wear recommended protective equipment(s). Keep unprotected persons away.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
  Surround and absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
- **Reference to other sections:**
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

### 7 Handling and storage

- **Precautions for safe handling:** Ensure good ventilation at the workplace.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Conditions for safe storage, including any incompatibilities:**
  Keep in the original receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

### 8 Exposure controls/ Personal protection

- **Components with limit values that require monitoring at the workplace:**

<table>
<thead>
<tr>
<th>64-17-5 Ethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL</td>
</tr>
<tr>
<td>EV</td>
</tr>
</tbody>
</table>

- **Exposure controls:**
  - **Undiluted Product**
  - **Personal protective equipment:**

    - Protective gloves (See Protection of Hands)
    - Safety glasses (See Eye protection)

- **General protective and hygienic measures:**
  Avoid contact with the eyes and skin.
  The usual precautionary measures for handling chemicals should be followed.
  Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:**
  Protective Gloves
Product name: EP66 Disinfectant and Sanitizer

The glove material has to be impermeable and resistant to the product. Check protective gloves prior to each use for their proper condition.

- **Eye protection:** Safety glasses are suggested when using this product in heavy use and institutional environments.
- **Body protection:** Protective work clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. (recommended)

### 9 Physical and chemical properties

- **Form:** Liquid
- **Colour:** Colorless
- **Odour:** Odourless
- **Odor threshold:** Not determined
- **pH-Value:** 6.5 – 8.5 (25°C)

**pH Value (diluted product):** Not determined

- **Melting point/Freezing point:** Not determined
- **Boiling point/Boiling range:** Undetermined.
- **Fusion temperature / range:** Not determined
- **Flash point:** Not determined
- **Flammability (solid, gaseous):** Not applicable

- **Ignition temperature:** N/D
- **Decomposition temperature:** Not determined
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**
- **Lower:** Not determined.
- **Upper:** Not determined.

- **Vapour pressure:** N/D
- **Relative density:** 0.985 - 1.005 (25 °C)
- **Vapour density (air=1):** <1 (aqueous solution)
- **Evaporation rate:** Not determined
- **Solubility in / Miscibility with Water:** Fully miscible

- **Partition coefficient (n-octanol/water):** Not determined

- **Solvent content:**
  - VOC content: N/D

### 10 Stability and reactivity

- **Reactivity:** Not determined.
- **Chemical stability:** The product is stable.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** Avoid freezing and extreme heat conditions.
- **Incompatible materials:** No further relevant information available.
Product name: EP66 Disinfectant and Sanitizer

- Hazardous decomposition products:
  In case of decomposition: carbon monoxide and carbon dioxide and traces of volatile halogenated compounds.

### 11 Toxicological information

- Information on the likely routes of exposure: Skin and eyes contact

#### Numerical mesure of acute toxicity:

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value (Species)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ATE</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50</td>
<td>5520 mg/kg</td>
</tr>
</tbody>
</table>

| 68391-01-5 Alkyl (C12-C18) Dimethyl Benzyl Ammonium Chloride | Oral | LD50 | 650 mg/kg (Rat) |
| 64-17-5 Ethanol | Oral | LD50 | 7060 mg/kg (Rat) |
| 64-17-5 Ethanol | Inhalative | LC50 (4 h) | 20000 mg/L (Rat) |

- Symptoms related to the physical, chemical and toxiological characteristics
  - If on the skin: CORROSIVE: Strong caustic effect on skin and mucous membranes.
  - If on the eye:
    - CORROSIVE: Strong caustic effect.
    - Strong irritant with the danger of severe eye injury.
  - After ingestion: May cause irritation of the gastrointestinal tract, nausea, vomiting and headache.
  - Sensitization: No sensitizing effects known.
  - Delayed and immediate effects, and chronic effects from short-term and long-term exposure:
    - Prolonged or frequent contact can cause eczema and inflammation of the skins as a results of degreasing.

- Carcinogenic categories:
  - IARC (International Agency for Research on Cancer)
    - 64-17-5 Ethanol: 1
  - NTP (National Toxicology Program):
    - None of the ingredients is listed.

### 12 Ecological information

- Bioaccumulative potential: No further relevant information available.
- Mobility in soil: Not determined
- Ecotoxicity: No relevant information available.
- Other adverse effects: No further relevant information available.

### 13 Disposal considerations

- Waste treatment methods recommendation:
  Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with local authority requirements. Dispose in accordance with all applicable federal, state, provincial and local laws and regulations. Contact your local, state, provincial or Federal environmental agency for specific rules.

- Uncleaned packagings recommendation:
  Do not re-use empty containers.
  Dispose of packaging according to regulations on the disposal of packagings.
47.1.4

· Recommended cleansing agent:
   Water

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 Transport information

· UN-Number
   DOT, IMDG, IATA  UN1760

· UN proper shipping name
   DOT+TDG  Corrosive liquids, n.o.s. (Quaternary Ammonium Compound, Quaternary Ammonium Compound)

· IMDG, IATA  CORROSIVE LIQUID, N.O.S. (Quaternary Ammonium Compound, Composés d'ammonium quaternaire)

· Transport hazard class(es)

  · DOT+TDG
    · Class  8 Corrosive substances
    · Label
    · IMDG, IATA
    · Class  8 Corrosive substances
    · Packing group
    · DOT, IMDG, IATA
    · Marine pollutant: No

· Special precautions for user
  Not applicable.

  · Warning: Corrosive substances

  · Danger code (Kemler):  80
  · EMS Number:  F-A,S-B
  · UN "Model Regulation":  UN 1760 CORROSIVE LIQUIDS, N.O.S. (QUATERNARY AMMONIUM COMPOUND, QUATERNARY AMMONIUM COMPOUND), 8, III

15 Regulatory information

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

· Canadian substance listings
  · Canadian Domestic Substances List (DSL)  Not all the ingredients are listed

  · Canadian Ingredient Disclosure list (limit 0.1%)
    64-17-5 Ethanol

  · Canadian Ingredient Disclosure list (limit 1%)
    None of the ingredients is listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

· Department issuing SDS:
  Prepared by:
  Regulatory Affairs Department

· Date of the latest revision of the safety data sheet  10/09/2018 / 13