1 Identification of substance

- **Product details**

- **Trade name:** GC Soft-Liner Liquid

- **Application of the substance / the preparation** Auxiliary for dental technology

- **Manufacturer/Supplier:**
  GC EUROPE N.V.
  Interleuvenlaan 13
  B-3001 Leuven
  Tel. +32/(0)16/39.80.50
  Fax +32/(0)16/40.26.84
  quality@gceurope.com

- **Information department:** Technical Operations

2 Composition/Data on components

- **Chemical characterization**

- **Description:**
  Mixture of the substances listed below with nonhazardous additions.
  Mixture: consisting of the following components.

- **Dangerous components:**

  | CAS: 64-17-5  | Ethyl alcohol | 15.0% |
  | EINECS: 200-578-6 |

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Hazard description:**
  Highly flammable

- **Information pertaining to particular dangers for man and environment:**
  The product has to be labelled due to the calculation procedure of international guidelines.
  Highly flammable.

- **Classification system:**
  The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **NFPA ratings (scale 0 - 4)**
  
<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>
Trade name: GC Soft-Liner Liquid

4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
  - Prevent seepage into sewage system, workpits and cellars.
  - Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collection:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
  - **Information for safe handling:** No special measures required.
  - **Information about protection against explosions and fires:**
    - Keep ignition sources away - Do not smoke.
    - Protect against electrostatic charges.
- **Storage:**
  - **Requirements to be met by storerooms and receptacles:** Store in a cool location.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:**
    - Keep receptacle tightly sealed.
    - Store in cool, dry conditions in well sealed receptacles.

* 8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethyl alcohol</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>1880 mg/m³, 1000 ppm</td>
</tr>
</tbody>
</table>
Additional information: The lists that were valid during the creation were used as basis.

Personal protective equipment:

- General protective and hygienic measures: Wash hands before breaks and at the end of work.
- Breathing equipment: Not required.
- Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
- Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles

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### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>General Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form: Fluid</td>
</tr>
<tr>
<td>Color: Clear</td>
</tr>
<tr>
<td>Odor: Characteristic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: 78°C (172°F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash point: 13°C (55°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignition temperature: 425.0°C (797°F)</td>
</tr>
<tr>
<td>Auto igniting: Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explosion limits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower: 3.5 Vol %</td>
</tr>
<tr>
<td>Upper: 15.0 Vol %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vapor pressure at 20°C (68°F): 59.0 hPa (44 mm Hg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density at 20°C (68°F): 1.04500 g/cm³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solubility in / Miscibility with Water: Not miscible or difficult to mix.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Solvent content:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic solvents: 15.0 %</td>
</tr>
<tr>
<td>VOC content: 15.0 %</td>
</tr>
</tbody>
</table>
### 10 Stability and reactivity
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions:** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

### 11 Toxicological information
- **Acute toxicity:**
  - **Primary irritant effect:**
    - **on the skin:** No irritant effect.
    - **on the eye:** No irritating effect.
  - **Sensitization:** No sensitizing effects known.

### 12 Ecological information
- **General notes:**
  - Water hazard class 1 (Self-assessment): slightly hazardous for water
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### 13 Disposal considerations
- **Product:**
  - **Recommendation:**
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information
- **DOT regulations:**
  - **Hazard class:** 3
  - **Identification number:** UN1170
  - **Packing group:** III
  - **Proper shipping name (technical name):** ETHANOL SOLUTION
  - **Label** 3
- **Land transport ADR/RID (cross-border):**
  - **ADR/RID class:** 3 (F1) Flammable liquids
  - **Danger code (Kemler):** 33
Trade name: GC Soft-Liner Liquid

- UN-Number: 1170
- Packaging group: III
- Label: 3
- Description of goods: 1170 ETHANOL SOLUTION

Maritime transport IMDG:
- IMDG Class: 3
- UN Number: 1170
- Label: 3
- Packaging group: III
- Marine pollutant: No
- Proper shipping name: ETHANOL SOLUTION

Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: 3
- UN/ID Number: 1170
- Label: 3
- Packaging group: III
- Proper shipping name: ETHANOL SOLUTION

15 Regulations

Sara
- Section 355 (extremely hazardous substances):
  None of the ingredient is listed.
- Section 313 (Specific toxic chemical listings):
  None of the ingredients is listed.

TSCA (Toxic Substances Control Act):
- All ingredients are listed.
- Proposition 65
  - Chemicals known to cause cancer:
    None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for females:
    None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for males:
    None of the ingredients is listed.
  - Chemicals known to cause developmental toxicity:
    64-17-5 ethyl alcohol

Cancerogenicity categories
- EPA (Environmental Protection Agency):
  None of the ingredients is listed.
Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 07/18/2007 Reviewed on 07/18/2007

Trade name: GC Soft-Liner Liquid

- IARC (International Agency for Research on Cancer)
  None of the ingredients is listed.

- NTP (National Toxicology Program)
  None of the ingredients is listed.

- TLV (Threshold Limit Value established by ACGIH)
  64-17-5 ethyl alcohol A4

- MAK (German Maximum Workplace Concentration)
  64-17-5 ethyl alcohol 5

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.

- Product related hazard informations:
  The product has been classified and marked in accordance with directives on hazardous materials.

- Hazard symbols:
  Highly flammable

- Risk phrases:
  Highly flammable.

- Safety phrases:
  Keep container tightly closed.
  Keep away from sources of ignition - No smoking.

- National regulations:
  Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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.

- Department issuing MSDS: Technical Operations
- Contact: Dr. P. Manouvriez

* Data compared to the previous version altered.