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

- **Trade name:** CANTESCO® FORMULA 365
- **Article number:**
- **MSDS Number:** 00081-CA-EN
- **UPC bar code(s):** 10195, 10200, 10205, 10210, 10215, 10222
- **Relevant identified uses of the substance:** LEAK DETECTION COMPOUND
- **Manufacturer/Supplier:**
  - WWW.CANTESCO.COM

**USA ADDRESS:**

KEMPER SYSTEM AMERICA, INC
1200 NORTH AMERICA DR,
WEST SENECA, NY 14224
PH (716) 693-8206

**CANADIAN ADDRESS:**

KEMPER SYSTEM CANADA
13 - 5200 DIXIE ROAD
MISSISSAUGA, ON L4W 1E4
PH (905) 624-5463
FAX (905) 624-2840

- **Information department:**
  - Tel: (716) 558-2971 ext. 228
  - www.cantesco.com
- **Emergency telephone number:**
  - USA: ChemTrec (800) 424-9300
  - Canada only: CANUTEC (Call collect) (613) 996-6666

(Contd. on page 2)
Trade name: CANTESCO® FORMULA 365

- **Hazard description:**
- **WHMIS-symbols:**
  - D2A - Very toxic material causing other toxic effects

- **NFPA ratings (scale 0 - 4):**
  - Health = 2
  - Fire = 0
  - Reactivity = 0

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**
  - 107-21-1 ethylene glycol
  - Acute Tox. 4, H302 30-60%

- **Additional information:** Exact concentrations are being withheld as trade secrets.

### 4 First aid measures

- **General information:** Symptoms of poisoning may even occur after several hours.
- **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 swallowed, do not induce vomiting. Get medical attention right away.
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:** No further relevant information available.

### 5 Firefighting measures

- **Suitable extinguishing agents:** CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.
Trade name: CANTESCO® FORMULA 365

- 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

- Handling
  - Precautions for safe handling:
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.
  - Information about protection against explosions and fires: No special measures required.

- Storage
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: None.
  - Specific end use(s): Leak detection compound

8 Exposure controls/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:
  107-21-1 ethylene glycol
  EL | Short-term value: C 100* 20** mg/m³, C 50*** ppm
      | Long-term value: 10** mg/m³
      | *Aerosol; **Particulate; ***Vapour
- Additional information: The lists that were valid during the creation were used as basis.
- Personal protective equipment
  - General protective and hygienic measures:
    Keep away from foodstuffs, beverages and feed.
    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.
    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.
  - Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

- Form: Liquid
- Color: Colorless
- Odor: Odorless
- Odour threshold: Not determined.
- pH-value at 20 °C: 7
### Trade name: CANTESCO® FORMULA 365

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range</td>
<td>-54 °C</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>410 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gaseous)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>410 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto igniting</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>3.2 Vol %</td>
</tr>
<tr>
<td>Upper</td>
<td>53.0 Vol %</td>
</tr>
<tr>
<td>Vapor pressure at 20 °C</td>
<td>24 mm Hg</td>
</tr>
<tr>
<td>Density at 20 °C:</td>
<td>1.075 g/cm³</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate at 20 °C</td>
<td>.610 (BA=1)</td>
</tr>
<tr>
<td>Solubility in / Miscibility with</td>
<td>Fully miscible.</td>
</tr>
<tr>
<td>Water</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solvent content</td>
<td></td>
</tr>
<tr>
<td>Organic solvents</td>
<td>0.0 %</td>
</tr>
<tr>
<td>Solids content</td>
<td>0.4 %</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.
11 Toxicological information

- Information on toxicological effects:
  - Acute toxicity
    - LD/LC50 values that are relevant for classification:
      - 107-21-1 ethylene glycol
        | Route | LD50/LC50 |
        |-------|-----------|
        | Oral  | 5840 mg/kg (rat) |
        | Dermal| 9530 mg/kg (rabbit) |
  - Specific symptoms in biological assay: No further relevant information available.
  - Primary irritant effect
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
  - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    The product shows the following dangers according to internally approved calculation methods for preparations:
    Harmful

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    None of the ingredients is listed.
  - NTP (National Toxicology Program)
    None of the ingredients is listed.

12 Ecological information

- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Behavior in environmental systems
- Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.
- Additional 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.
  Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  Recommendation:
  Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings
  Recommendation:
  Place in a sealed container and label as waste. Place in a safe area, and comply with all federal, state, provincial and local regulations for disposal.
### 14 Transport information

- **UN-Number**: Not Available
- **DOT, TDG, ADN, IMDG, IATA**: Not Available
- **UN proper shipping name**: Not Available
- **DOT, TDG, ADN, IMDG, IATA**: Not Available
- **Transport hazard class(es)**: Class Not Available
- **Packing group**: DOT, TDG, IMDG, IATA Not Available
- **Environmental hazards**: Marine pollutant: No
- **Special precautions for user**: Not applicable.
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**: Not applicable.
- **UN "Model Regulation"**: -

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
  - **Section 355 (extremely hazardous substances)**: None of the ingredients is listed.
  - **Section 313 (Specific toxic chemical listings)**:
    - 107-21-1 ethylene glycol
    - 3251-23-8 copper dinitrate
  - **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**: None of the ingredients is listed.
  - **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)**: None of the ingredients is listed.
Safety Data Sheet  
acc. to OSHA HCS

Printing date 10/01/2013  
Reviewed on 10/01/2013

Trade name: CANTESCO® FORMULA 365

| · TLV (Threshold Limit Value established by ACGIH): |
| 107-21-1 ethylene glycol |
| A4 |

| · 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. |

| · Canadian substance listings |
| · Canadian Domestic Substances List (DSL): |
| All ingredients are listed. |

| · Canadian Ingredient Disclosure list (limit 0.1%): |
| None of the ingredients is listed. |

| · Canadian Ingredient Disclosure list (limit 1%): |
| 107-21-1 ethylene glycol |

| · Product related hazard informations: |
| · Risk phrases: |
| Harmful if swallowed. |

| · Safety phrases: |
| Keep out of the reach of children. |
| Keep away from food, drink and animal feedingstuffs. |
| Wear suitable protective clothing. |
| If swallowed, seek medical advice immediately and show this container or label. |

| 16 Other information |
| This MSDS format meets ANSI Z400.1-1998, OSHA 1910.1200 and WHMIS requirements. Kemper System America, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of Kemper System America, Inc. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made. Kemper System America, Inc is an ISO 9001:2008 registered company. |

| · Department issuing MSDS: |
| Product safety department |

| · Contact: |
| Stephen Nowicki |

| · Abbreviations and acronyms: |
| IMDG: International Maritime Code for Dangerous Goods |
| DOT: US Department of Transportation |
| IATA: International Air Transport Association |
| ACGIH: American Conference of Governmental Industrial Hygienists |
| NFPA: National Fire Protection Association (USA) |
| WHMIS: Workplace Hazardous Materials Information System (Canada) |
| LC50: Lethal concentration, 50 percent |
| LD50: Lethal dose, 50 percent |