1 Identification

- **Product identifier:** D2000-A
- **Trade name:** CANTESCO® D2000-A DEVELOPER - NONAQUEOUS WET
- **Item number(s):** D2000-A
- **MSDS Number:** 44
- **UPC bar code(s):** 699913-11105
- **Application of the substance / the mixture:** DEVELOPER
- **Manufacturer/Supplier:**
  WWW.CANTESCO.COM

**USA ADDRESS:**
KEMPER SYSTEM AMERICA, INC.
1200 NORTH AMERICA DR,
WEST SENECA, NY 14224
PH (716) 558-2971

**CANADIAN ADDRESS:**
KEMPER SYSTEM CANADA
6345 NETHERHART ROAD
MISSISSAUGA, ON L5T 1B8
PH (905) 624-5463
FAX (905) 624-2840

- **Information department:**
  Tel: (716) 558-2971 ext. 228
  www.cantesco.com
- **Emergency telephone number:**
  ChemTrec (800) 424-9300 / 1-(703)-741-5970
  Canada only: CANUTEC (Call collect) (613) 996-6666

2 Hazard(s) identification

- **Classification of the substance or mixture:**
  - **GHS02 Flame**
    Flammable Aerosols - Category 1
  - **H222-H229 Extremely flammable aerosol.**
    Pressurized container: may burst if heated.

  - **GHS04 Gas cylinder**
    Gases Under Pressure - Compressed Gas
  - **H280 Contains gas under pressure; may explode if heated.**

(Contd. on page 2)
Trade name: CANTESCO® D2000-A DEVELOPER - NONAQUEOUS WET

GHS08 Health hazard

Carcinogenicity – Category 2 H351 Suspected of causing cancer.
Specific Target Organ Toxicity - Single Exposure - Category 1 H370 Causes damage to organs.

GHS07

Eye Irritation - Category 2A H319 Causes serious eye irritation.

· Label elements
· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
· Signal word: Danger

· Hazard-determining components of labeling:
  ethanol
  methanol
  4-methylpentan-2-one

· Hazard statements:
  H222-H229 Extremely flammable aerosol.
  H280 Contains gas under pressure; may explode if heated.
  H319 Causes serious eye irritation.
  H351 Suspected of causing cancer.
  H370 Causes damage to organs.

· Precautionary statements:
  P201 Obtain special instructions before use.
  P202 Do not handle until all safety precautions have been read and understood.
  P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  P211 Do not spray on an open flame or other ignition source.
  P251 Do not pierce or burn, even after use.
  P260 Do not breathe dust/fume/gas/mist/vapours/spray.
  P264 Wash thoroughly after handling.
  P270 Do not eat, drink or smoke when using this product.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P308+P313 IF exposed or concerned: Get medical advice/attention.
  P337+P313 If eye irritation persists: Get medical advice/attention.
  P405 Store locked up.
  P410+P403 Protect from sunlight. Store in a well-ventilated place.
  P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
  P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· NFPA ratings (scale 0 - 4): Health = 1 Fire = 4 Reactivity = 0
Trade name: CANTESCO® D2000-A DEVELOPER - NONAQUEOUS WET

3 Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Chemical characterization</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>30-60% w/w *</td>
</tr>
<tr>
<td>74-98-6 propane</td>
<td>10-30% w/w *</td>
</tr>
<tr>
<td>106-97-8 butane</td>
<td>10-30% w/w *</td>
</tr>
<tr>
<td>76-28-5 isobutane</td>
<td>5-10% w/w *</td>
</tr>
<tr>
<td>67-56-1 methanol</td>
<td>≥3-&lt;5% w/w *</td>
</tr>
<tr>
<td>108-10-1 4-methylpentan-2-one</td>
<td>0.1-1% w/w *</td>
</tr>
</tbody>
</table>

* Actual concentration ranges are withheld as a trade secret.
· Additional information: Exact concentrations and/or compositions are being withheld as trade secrets.

4 First-aid measures

· After inhalation: Supply fresh air; consult doctor in case of complaints.
· After skin contact:
  Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
· After eye contact:
  Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If eye irritation persists get medical advice/attention.
· After swallowing:
  Do not induce vomiting, Immediately call a poison center/doctor.
· 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 Fire-fighting measures

· Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
· For safety reasons unsuitable extinguishing agents: Water with full jet
· 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:
  Wear protective equipment. Keep unprotected persons away.
· Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/ surface or ground water.
· Methods and material for containment and cleaning up:
  Ensure adequate ventilation.
  Do not flush with water or aqueous cleansing agents
· Reference to other sections:
  See Section 7 for information on safe handling.
7 Handling and storage

- **Handling**
  - **Precautions for safe handling**: Open and handle receptacle with care.
  - **Information about protection against explosions and fires**: Do not spray on a naked flame or any incandescent material. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

- **Storage**
  - **Requirements to be met by storerooms and receptacles**: Store in a cool location. Observe official regulations on storing packagings with pressurized containers.
  - **Information about storage in one common storage facility**: Not required.
  - **Further information about storage conditions**: Keep receptacle tightly sealed. Do not gas tight seal receptacle. Store in cool, dry conditions in well sealed receptacles. Protect from heat and direct sunlight.
  - **Specific end use(s)**: No further relevant information available.

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**:

<table>
<thead>
<tr>
<th>Component</th>
<th>Canada EL</th>
<th>Canada EV</th>
<th>USA PEL</th>
<th>USA REL</th>
<th>USA TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>Short-term value: 1000 ppm</td>
<td>Long-term value: 1,900 mg/m³, 1,000 ppm</td>
<td>Long-term value: 1900 mg/m³, 1000 ppm</td>
<td>Long-term value: 1900 mg/m³, 1000 ppm</td>
<td>Short-term value: 1880 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>74-98-6 propane</td>
<td>Simple asphyxiant; EX</td>
<td>Long-term value: 1,000 ppm (revoked as of 01/01/18)</td>
<td>Long-term value: 1800 mg/m³, 1000 ppm</td>
<td>Long-term value: 1800 mg/m³, 1000 ppm</td>
<td>refer to Appendix F in TLVs &amp; BEIs book; D, EX</td>
</tr>
<tr>
<td>106-97-8 butane</td>
<td>Short-term value: 1000 ppm</td>
<td>EX (revoked as of 01/01/18)</td>
<td>Long-term value: 800 ppm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Trade name: CANTESCO® D2000-A DEVELOPER - NONAQUEOUS WET

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>REL (USA)</th>
<th>TLV (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>75-28-5 isobutane</strong></td>
<td>Long-term value: 1900 mg/m³, 800 ppm</td>
<td>Short-term value: 2370 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 1000 ppm</td>
<td>EX</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 800 ppm</td>
<td>revoked as of 01/01/18</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 2370 mg/m³, 1000 ppm</td>
<td>(EX)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>REL (USA)</th>
<th>TLV (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>67-56-1 methanol</strong></td>
<td>Long-term value: 260 mg/m³, 200 ppm</td>
<td>Long-term value: 20 ppm</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 250 ppm</td>
<td>Skin</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Short-term value: 325 mg/m³, 250 ppm</td>
<td>Long-term value: 260 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 260 mg/m³, 200 ppm</td>
<td></td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Short-term value: 325 mg/m³, 250 ppm</td>
<td>Long-term value: 260 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>Skin</td>
<td>Long-term value: 260 mg/m³, 200 ppm</td>
<td></td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 328 mg/m³, 250 ppm</td>
<td>Long-term value: 262 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>Skin; BEI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>REL (USA)</th>
<th>TLV (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>108-10-1 4-methylpentan-2-one</strong></td>
<td>Long-term value: 82 mg/m³, 20 ppm</td>
<td>Long-term value: 20 ppm</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 75 ppm</td>
<td>Long-term value: 20 ppm</td>
</tr>
<tr>
<td>IARC 2B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Short-term value: 75 ppm</td>
<td>Long-term value: 205 mg/m³, 50 ppm</td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 410 mg/m³, 100 ppm</td>
<td></td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Short-term value: 300 mg/m³, 75 ppm</td>
<td>Long-term value: 205 mg/m³, 50 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 307 mg/m³, 75 ppm</td>
<td>Long-term value: 82 mg/m³, 20 ppm</td>
</tr>
<tr>
<td>BEI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Ingredients with biological limit values:**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>BEI (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>67-56-1 methanol</strong></td>
<td>15 mg/L</td>
</tr>
<tr>
<td>Medium: urine</td>
<td></td>
</tr>
<tr>
<td>Time: end of shift</td>
<td></td>
</tr>
<tr>
<td>Parameter: Methanol (background, nonspecific)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>BEI (USA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>108-10-1 4-methylpentan-2-one</strong></td>
<td>1 mg/L</td>
</tr>
<tr>
<td>Medium: urine</td>
<td></td>
</tr>
<tr>
<td>Time: end of shift</td>
<td></td>
</tr>
<tr>
<td>Parameter: MIBK</td>
<td></td>
</tr>
</tbody>
</table>

- **Additional information:** The lists that were valid during the creation were used as basis.
Safety Data Sheet
acc. to OSHA HCS & WHMIS

Trade name: CANTESCO® D2000-A DEVELOPER - NONAQUEOUS WET

- 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: Use suitable respiratory protective device in case of insufficient ventilation.
- Protection of hands:
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Material of gloves:
  Butyl rubber, BR
  Nitrile rubber, NBR
- Eye protection:
  Tightly sealed goggles

9 Physical and chemical properties

- Form: Suspension
- Color: White
- Odor: Paint-like
- Odor threshold: Not determined.
- pH-value: Not determined.
- Change in condition
  Melting point/Melting range: Undetermined.
  Boiling point/Boiling range: 78 °C
- Flash point: 13 °C
- Flammability (solid, gaseous): Extremely flammable liquefied gas.
- Ignition temperature: 425 °C
- Decomposition temperature: Not determined.
- Auto igniting: Product is not selfigniting.
- Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- Explosion limits
  Lower: 3.5 Vol %
  Upper: 15 Vol %
- Vapor pressure at 20 °C: 59 hPa
- Density: Not determined.
- Relative density: Not determined.
- Vapor density: Not determined.
- Evaporation rate: Not applicable.
- Solubility in / Miscibility with
  Water: Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water): Not determined.

(Contd. on page 7)
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:
      67-56-1 methanol
      Oral LD50 5,628 mg/kg (rat)
      Dermal LD50 15,800 mg/kg (rabbit)
  - Primary irritant effect
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
    - Sensitization: No sensitizing effects known.
  - Additional toxicological information:
    - Carcinogenic categories
      - IARC (International Agency for Research on Cancer)
        64-17-5 ethanol 1
        108-10-1 4-methylpentan-2-one 2B
      - 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
  · DOT, TDG, IMDG, IATA: UN1950
- UN proper shipping name
  · DOT: Aerosols, flammable
  · TDG: 1950 AEROSOLS
  · IMDG: AEROSOLS
  · IATA: AEROSOLS, flammable
- Transport hazard class(es)
  · DOT
    · Class: 2.1
    · Label: 2.1
  · TDG (Transport dangerous goods):
    · Class: 2 5F Gases
    · Label: 2.1
  · IMDG, IATA
    · Class: 2.1
### Trade name: CANTESCO® D2000-A DEVELOPER - NONAQUEOUS WET

<table>
<thead>
<tr>
<th>· Label</th>
<th>2.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Packing group</td>
<td>· DOT, TDG, IMDG, IATA</td>
</tr>
<tr>
<td>· Packing group</td>
<td>Not regulated</td>
</tr>
<tr>
<td>· Environmental hazards:</td>
<td>· Marine pollutant:</td>
</tr>
<tr>
<td>· Special precautions for user:</td>
<td>Warning: Gases</td>
</tr>
<tr>
<td>· Danger code (Kemler):</td>
<td>-</td>
</tr>
<tr>
<td>· EMS Number:</td>
<td>F-D,S-U</td>
</tr>
<tr>
<td>· Stowage Code</td>
<td>SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.</td>
</tr>
<tr>
<td>· Segregation Code</td>
<td>SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow &quot;separated from&quot; class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.</td>
</tr>
</tbody>
</table>

| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: | Not applicable. |

| · Transport/Additional information: |
| · DOT | On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg |
| · Remarks: | This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met. |

| · TDG | This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met. |
| · Excepted quantities (EQ) | Code: E0 Not permitted as Excepted Quantity |

| · IMDG | 1L |
| · Limited quantities (LQ) | Code: E0 Not permitted as Excepted Quantity |
| · Remarks: | This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met. |

| · IATA | Remarks: |
| · Remarks: | This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met. |

| · UN "Model Regulation": | UN 1950 AEROSOLS, 2.1 |

(Contd. on page 10)
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):
      67-56-1 methanol
      108-10-1 4-methylpentan-2-one
  - TSCA (Toxic Substances Control Act):
    All ingredients are listed or exempted
  - Proposition 65
    - Chemicals known to cause cancer:
      108-10-1 4-methylpentan-2-one
    - 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:
      67-56-1 methanol
      108-10-1 4-methylpentan-2-one
- Canadian substance listings
  - Canadian Domestic Substances List (DSL/NDSL):
    All ingredients are listed.
  - Canadian Ingredient Disclosure list (limit 0.1%):
    64-17-5 ethanol
  - Canadian Ingredient Disclosure list (limit 1%):
    106-97-8 butane
    67-56-1 methanol
- GHS label elements
  The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms
  - GHS02
  - GHS04
  - GHS07
  - GHS08
- Signal word
  Danger
- Hazard-determining components of labeling:
  - ethanol
  - methanol
  - 4-methylpentan-2-one
- Hazard statements
  - H222-H229 Extremely flammable aerosol.
  - H280 Contains gas under pressure; may explode if heated.
  - H319 Causes serious eye irritation.
  - H351 Suspected of causing cancer.
Trade name: CANTESCO® D2000-A DEVELOPER - NONAQUEOUS WET

H370 Causes damage to organs.

**Precautionary statements**

- **P201** Obtain special instructions before use.
- **P202** Do not handle until all safety precautions have been read and understood.
- **P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- **P211** Do not spray on an open flame or other ignition source.
- **P251** Do not pierce or burn, even after use.
- **P260** Do not breathe dust/fume/gas/mist/vapours/spray.
- **P264** Wash thoroughly after handling.
- **P270** Do not eat, drink or smoke when using this product.
- **P280** Wear protective gloves/protective clothing/eye protection/face protection.
- **P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- **P308+P313** IF exposed or concerned: Get medical advice/attention.
- **P337+P313** If eye irritation persists: Get medical advice/attention.
- **P405** Store locked up.
- **P410+P403** Protect from sunlight. Store in a well-ventilated place.
- **P410+P412** Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- **P501** Dispose of contents/container in accordance with local/Regional/national/international regulations.

**16 Other information**

This SDS format meets ANSI Z400.1-2010, 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 9001:2015 and ISO 14001:2015 registered company.

- **Department issuing SDS:** Product safety department
- **Contact:** Stephen Nowicki
- **Date of the latest revision of the safety data sheet** 11/13/2018 / -
- **Abbreviations and acronyms:**
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - NFPA: National Fire Protection Association (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent