1 Identification

- **Product identifier**: D101NFA
- **Trade name**: CANTESCO® D101NFA DEVELOPER - NONFLAMMABLE
- **Item number(s)**: D101NFA
- **MSDS Number**: 38
- **UPC bar code(s)**: 699913-11630
- **Application of the substance / the mixture**: DEVELOPER
- **Manufacturer/Supplier**: WWW.CANTESCO.COM

**USA ADDRESS:**
KEMPER SYSTEM AMERICA, INC.
1200 NORTH AMERICA DR,
WEST SENECAN, 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
  Canada only: CANUTEC (Call collect) (613) 996-6666

2 Hazard(s) identification

- **Classification of the substance or mixture**:
  
  ![GHS04 Gas cylinder]
  
  Gases Under Pressure - Dissolved Gas
  
  H280 Contains gas under pressure; may explode if heated.

  ![GHS08 Health hazard]
  
  Carcinogenicity – Category 2
  
  H351 Suspected of causing cancer.

  Specific Target Organ Toxicity - Repeated Exposure - Category 2
  
  H373 May cause damage to the central nervous system, the liver and the blood through prolonged or repeated exposure.

(Contd. on page 2)
GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.
Skin Irritation - Category 2 H315 Causes skin irritation.
Eye Irritation - Category 2A H319 Causes serious eye irritation.
Specific Target Organ Toxicity - Single Exposure - Category 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Signal word: Warning

Hazard-determining components of labeling:
methylene chloride
methanol

Hazard statements:
Contains gas under pressure; may explode if heated.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.
May cause respiratory irritation. May cause drowsiness or dizziness.
May cause damage to the central nervous system, the liver and the blood through prolonged or repeated exposure.

Precautionary statements:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Do not pierce or burn, even after use.
Do not breathe mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED: Call a doctor if you feel unwell.
IF INHALED: Call a doctor if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Get medical advice/attention if you feel unwell. Rinse mouth.
IF ON SKIN: Wash with plenty of soap and water.
Take off contaminated clothing and wash it before reuse.
Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Store in a well-ventilated place.
Dispose of contents/container in accordance with local/regional/national/international regulations.
Trade name: CANTESCO® D101NFA DEVELOPER - NONFLAMMABLE

- NFPA ratings (scale 0 - 4):
  - Health = 3
  - Fire = 0
  - Reactivity = 0

3 Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>75-09-2 methylene chloride</td>
<td>60-100% w/w</td>
</tr>
<tr>
<td>68476-85-7 Petroleum gases, liquefied</td>
<td>10-30% w/w</td>
</tr>
<tr>
<td>471-34-1 calcium carbonate</td>
<td>3-7% w/w</td>
</tr>
<tr>
<td>67-56-1 methanol</td>
<td>3-5% w/w</td>
</tr>
</tbody>
</table>

- 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: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
  - 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 for medical help.
  
- 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, 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: Mouth respiratory protective device.

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.
7 Handling and storage

- Handling
  - Precautions for safe handling:
    Ensure good ventilation/exhaustion at the workplace.
    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.
    Keep respiratory protective device available.

- Storage
  - Requirements to be met by storerooms and receptacles:
    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.
  - 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></th>
<th>75-09-2 methylene chloride</th>
<th>68476-85-7 Petroleum gases, liquefied</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 25 ppm</td>
<td>Short-term value: 1250 ppm</td>
</tr>
<tr>
<td></td>
<td>IARC 2B</td>
<td>Long-term value: 1200 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 175 mg/m³, 50 ppm</td>
<td>Long-term value: 1800 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Short-term value: 125 ppm</td>
<td>Long-term value: 1800 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 25 ppm</td>
<td>REL (USA)</td>
</tr>
<tr>
<td></td>
<td>see 29 CFR 1910,1052</td>
<td>REL (USA)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See Pocket Guide App. A</td>
</tr>
<tr>
<td>REL (USA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 174 mg/m³, 50 ppm</td>
<td>TLV (USA)</td>
</tr>
<tr>
<td></td>
<td>BEI</td>
<td>refer to Appendix F in TLVs &amp; BEIs book; NIC-EX</td>
</tr>
</tbody>
</table>
### 471-34-1 calcium carbonate

<table>
<thead>
<tr>
<th></th>
<th>Long-term value: 15* 5** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>total dust **respirable fraction</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>total dust **respirable fraction</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>TLV withdrawn</td>
</tr>
</tbody>
</table>

### 67-56-1 methanol

|                | EL (Canada) | Short-term value: 250 ppm |
|                |            | Long-term value: 200 ppm  |
|                |            | Skin                      |
|                | EV (Canada)| Short-term value: 325 mg/m³, 250 ppm |
|                |            | Long-term value: 260 mg/m³, 200 ppm |
|                |            | Skin                      |
| PEL (USA)      | Long-term value: 260 mg/m³, 200 ppm |
| REL (USA)      | Short-term value: 325 mg/m³, 250 ppm |
|                | Long-term value: 260 mg/m³, 200 ppm |
|                | Skin        |
| TLV (USA)      | Short-term value: 328 mg/m³, 250 ppm |
|                | Long-term value: 262 mg/m³, 200 ppm |
|                | Skin; BEI   |

### Ingredients with biological limit values:

#### 75-09-2 methylene chloride

- **BEI (USA)**: 0,3 mg/L
  - Medium: urine
  - Time: end of shift
  - Parameter: Dichloromethane (semi-quantitative)

#### 67-56-1 methanol

- **BEI (USA)**: 15 mg/L
  - Medium: urine
  - Time: end of shift
  - Parameter: Methanol (background, nonspecific)

### 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.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.

### Breathing equipment:
Use suitable respiratory protective device in case of insufficient ventilation.

### Protection of hands:

![Protective gloves](symbol)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

### Material of gloves:
PVA gloves
### 9 Physical and chemical properties

- **Form:** Aerosol  
- **Color:** Cloudy  
- **Odor:** Paint-like  
- **Odor threshold:** Not determined.  
- **pH-value:** Not determined.  

#### Change in condition

- **Melting point/Melting range:** Undetermined.  
- **Boiling point/Boiling range:** >56 °C  

- **Flash point:** Not applicable, as aerosol.  
- **Flammability (solid, gaseous):** Not applicable.  
- **Ignition temperature:** 455 °C  
- **Decomposition temperature:** Not determined.  
- **Auto igniting:** Product is not selfigniting.  

- **Danger of explosion:** Product does not present an explosion hazard.  

- **Explosion limits**  
  - Lower: 13,0 Vol %  
  - Upper: 22,0 Vol %  

- **Vapor pressure at 20 °C:** 453 hPa  
- **Density at 20 °C:** 0,715 g/cm³  
- **Relative density:** Not determined.  
- **Vapour 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.  

- **Viscosity**  
  - **Dynamic:** Not determined.  
  - **Kinematic:** Not determined.  

- **Solvent content**  
  - **Organic solvents:** 91,0 %  
  - **Solids content:** 9,1 %  

(Contd. on page 7)
Trade name: CANTESCO® D101NFA DEVELOPER - NONFLAMMABLE

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:**
      - 75-09-2 methylene chloride
        - Oral LD50 1600 mg/kg (rat)
        - Inhalative LC50/4 h 88 mg/l (rat)
      - 67-56-1 methanol
        - Oral LD50 5628 mg/kg (rat)
        - Dermal LD50 15800 mg/kg (rabbit)
  - **Primary irritant effect**
    - **on the skin:** Irritant to skin and mucous membranes.
    - **on the eye:** 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.
  - **Carcinogenic categories**
    - **IARC (International Agency for Research on Cancer)**
      - 75-09-2 methylene chloride 2B
    - **NTP (National Toxicology Program)**
      - 75-09-2 methylene chloride R

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 3 (Self-assessment): extremely hazardous for water
  - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.

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
  - TDG
    1950 Aerosols
  - IMDG
    AEROSOLS

- Transport hazard class(es)
  - DOT
    - Class 2.2
    - Label 2.2, 6.1
  - TDG (Transport dangerous goods):
    - Class 2 Gases
    - Label 2.2+6.1
  - IMDG
    - Class 2.2
## Safety Data Sheet

**Trade name:** CANTESCO® D101NFA DEVELOPER - NONFLAMMABLE

<table>
<thead>
<tr>
<th><strong>Label</strong></th>
<th>2.2/6.1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IATA</strong></td>
<td>![IATA Symbol]</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Label</strong></td>
<td>2.2 (6.1)</td>
</tr>
</tbody>
</table>

### Packing group

<table>
<thead>
<tr>
<th><strong>DOT</strong></th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TDG, IMDG, IATA</strong></td>
<td>III</td>
</tr>
</tbody>
</table>

### Environmental hazards:

- **Marine pollutant:** No

### Special precautions for user:

- **Warning:** Gases
- **Danger code (Kemler):** -
- **EMS Number:** F-D,S-U
- **Stowage Code**
  - SW1 Protected from sources of heat.
  - SW2/2 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.
- **Segregation Code**
  - SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" 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.

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:

- **Transport/Additional information:** Not applicable.

### DOT

- **Quantity limitations**
  - On passenger aircraft/rail: Forbidden
  - On cargo aircraft only: Forbidden
- **Remarks:** This product may be shipped according to the Limited Quantity Exceptions provided that all Limited Quantity shipping requirements are met.

### TDG

- **Excepted quantities (EQ)**
  - 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.

### IMDG

- **Limited quantities (LQ)**
  - 1L
- **Excepted quantities (EQ)**
  - Code: E0
  - Not permitted as Excepted Quantity
Trade name: CANTESCO® D101NFA DEVELOPER - NONFLAMMABLE

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

IATA
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, 2.2 (6.1), III

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):
- 75-09-2 methylene chloride
- 67-56-1 methanol

TSCA (Toxic Substances Control Act):
All ingredients are listed or exempted

Proposition 65

Chemicals known to cause cancer:
- 75-09-2 methylene chloride

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

Canadian substance listings

Canadian Domestic Substances List (DSL/NDSL):
All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%):
- 75-09-2 methylene chloride

Canadian Ingredient Disclosure list (limit 1%):
- 67-56-1 methanol

GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS04  GHS07  GHS08
· **Signal word** Warning

· **Hazard-determining components of labeling:**
  - methylene chloride
  - methanol

· **Hazard statements**
  Contains gas under pressure; may explode if heated.
  Harmful if swallowed.
  Causes skin irritation.
  Causes serious eye irritation.
  Suspected of causing cancer.
  May cause respiratory irritation. May cause drowsiness or dizziness.
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· **Precautionary statements**
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  Do not pierce or burn, even after use.
  Do not breathe mist/vapours/spray.
  Wear protective gloves/protective clothing/eye protection/face protection.
  Wash thoroughly after handling.
  Do not eat, drink or smoke when using this product.
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  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  IF exposed or concerned: Get medical advice/attention.
  If skin irritation occurs: Get medical advice/attention.
  If eye irritation persists: Get medical advice/attention.
  Get medical advice/attention if you feel unwell.
  Rinse mouth.
  IF ON SKIN: Wash with plenty of soap and water.
  Take off contaminated clothing and wash it before reuse.
  Store locked up.
  Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
  Store in a well-ventilated place.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Information about limitation of use:**
  Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
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 and ISO 14001:2004 registered company.

- **Department issuing SDS:** Product safety department
- **Contact:** Stephen Nowicki
- **Date of preparation / last revision:** 11/23/2016 / -
- **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)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent