CaiKleen NF is compatible with most materials. However, in large scale use we recommend compatibility testing for the specific applications. Contact manufacturer for guidelines and assistance. Product includes Vertrel C as the carrier solvent to assist flushing away contaminants. It is fast evaporating, non-flammable, and non-aggressive to most materials. 

**Note:** CaiKleen NF Liquid: Using a lint-free applicator (cotton cloth, foam swab), wipe on surface until surface appears clean. CaiKleen NF PUMP Spray: Spray one small burst to the surface. If accessible, wipe the surface with a lint-free cloth or swab until it appears clean. Then spray one more quick burst.

**WARNING:** Remove extension tube from actuator/button before applying heat and make sure there is no fluid on or in the extension tube when melting the end of the tube.

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**1.1 COMMERCIAL PRODUCT NAME (PRODUCT CODE NO.):**
- CaiKleen NF Pump Spray (NF100PS-6)
- CaiKleen NF Liquid, 118ml (NF100L-4)
- CaiKleen NF Liquid, 354ml (NF100L-12)

**1.2 COMPANY:**
- **CAIG Laboratories, Inc.**
- **12200 Thatcher Court**
- **Poway, CA 92064 U.S.A.**
- **PREPARED BY:** Mark K.
- **LOHKEMPER**
- **REVISION DATE:** 06-16-2003

**FORM #:** NF100L

**CUSTOMER SERVICE:** CAIG: 1-858/486–8388

**EMERGENCY:** CHEMTREC: 1-800/424-9300

**9300**

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

**2.1 HAZARDOUS SYMBOL(S) C.A.S. WT.**

**INGREDIENTS**

*a) 1,1,1,2,3,4,5,5,5-decafluoropentane (HFC-43-10mee) 138495-42-8 49-51%*  

**2.2 OSHA HAZARDOUS COMPONENTS (29CFR1910.1200)**

**NONE**

**TSCA INVENTORY:** All ingredients are listed on the TSCA inventory.

**EC DIRECTIVE:** Complies with EC Directive 91/155/EEC

### 3. HAZARDS IDENTIFICATION

Nonflammable solvent blend. Liquid will irritate eyes and skin under repeated or prolonged exposure. Breathing high concentrations of product vapor may produce drowsiness or headache. Product may be hazardous to fish & wildlife and may contaminate waterways.

**California Proposition 65:** The California list of chemicals, "known to cause cancer or reproductive toxicity" is so extensive it requires more clarification, research and evaluation. Meanwhile, all chemicals distributed by, or manufactured by CAIG Laboratories, shall be assumed to be on the list or contain detectable amounts of chemical listed.

### 4. FIRST-AID MEASURES

**4.1 SKIN CONTACT:** Wash with soap & water. Seek medical attention if irritation persists.

**4.2 EYE CONTACT:** Immediately flush with plenty of water. Remove any contact lenses and continue flushing for at least 15 minutes. Seek medical attention if irritation develops or persists.

**4.3 INGESTION:** Seek medical attention immediately. Induce vomiting only as directed by medical personnel.

**4.4 INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

### 5. FIRE-FIGHTING MEASURES

**5.1 FLASH POINT:** none, Method: Pensky-Martens Closed Cup (ASTM D93)

**5.2 FLAMMABLE LIMITS, % VOL.:**  

**LOWER = 5.5, UPPER = 9.0**

**5.3 EXTINGUISHING MEDIA:**  

**Suitable - Alcohol foam, water fog, dry chemical, CO2.**

**Not to be used:** Water.

**5.4 SPECIAL EXPOSURE HAZARDS:** Carbon dioxide, carbon monoxide, hydrocarbons.

**5.5 SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:** As in any fire, wear self-contained breathing apparatus and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

**6.1 PERSONAL PRECAUTIONS:** Wear respiratory protection in confined spaces and appropriate personal protective equipment; eye protection, chemically resistant gloves. Ventilate area and remove all sources of ignition.

**6.2 ENVIRONMENTAL PRECAUTIONS:** Avoid runoff into sewers and ditches that lead to waterways.

**6.3 METHODS OF CLEAN UP:** Observe recommendations for personal protective equipment detailed in Section 8. For large spills, absorb with inert material such as sand, clay or dirt and place in sealed metal container for disposal. Since products are not normally used in large quantities and product is non-hazardous, absorb with inert material and discard as you would mineral oil.

### 7. HANDLING AND STORAGE

**7.1 STORAGE:** Store in a cool, dry place, away from heat, sparks or flames. Keep container tightly closed when not in use. Do not store in direct sunlight. Keep out of reach of children.

**7.2 HANDLING:** Avoid prolonged or repeated contact with skin, eyes or clothing. Avoid breathing product vapor for extended periods of time. Use only with adequate ventilation. General ventilation should be adequate, but use local exhaust ventilation in confined spaces or at points of excessive discharge. Avoid activities that could cause splashing of the spilled material or create mist.

**KEEP OUT OF REACH OF CHILDREN**

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 ENGINEERING PROTECTIVE MEASURES:** General ventilation should be sufficient to control airborne vapor levels. Local exhaust ventilation should be used if large amounts are released.

**8.2 PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY PROTECTION:** Full-face respirator mask equipped with acid gas/organic vapor cartridge or fume hood or other type of local exhaust ventilation.

**EYE PROTECTION:** Wear safety glasses, splash goggles or a full-face shield depending on the amount of exposure and likelihood of a splash hazard.

**HAND PROTECTION:** Wear chemically resistant rubber gloves with repeated exposure.

**OTHER:** None required for normal conditions of industrial use.

**8.3 INDUSTRIAL HYGIENE:** Wash hands before eating or smoking when using this product.

**8.4 NFPA and HMIS Codes:**

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
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FURTHER INFORMATION: None of the components of this product are known to have carcinogenic, mutagenic, teratogenic, sensitization effects. Breathing high vapor concentrations for long periods of time may lead to narcosis.

11.2 CANCER INFORMATION: No ingredients listed as human carcinogens by NTP or IARC.

11.3 REPRODUCTIVE EFFECTS: None

11.4 TERATOGENIC EFFECTS: None

11.5 MUTAGENIC EFFECTS: None

12. ECOLOGICAL INFORMATION

In large quantities, water runoff may cause environmental damage.

ENVIRONMENTAL IMPACT DATA (percent by weight)

<table>
<thead>
<tr>
<th>CFC: 0.0%</th>
<th>HCFC: 0.0%</th>
<th>CL.SOLV.: 0.0%</th>
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<tbody>
<tr>
<td>VOC: 0.0%</td>
<td>HFC: 8.0%</td>
<td>ODP: 0.0%</td>
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</tbody>
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13. DISPOSAL CONSIDERATIONS

13.1 PREPARATION: Product waste is suitable for fuels blending for energy recovery or disposal by incineration. Product may be recoverable by distillation or recycling.

13.2 PACKAGING: Package, transport and dispose of in accordance with local or national regulations that apply to substances & preparations of this nature.

14. TRANSPORTATION INFORMATION

14.1 DOT

Shipping Name: Consumer Product
Class: ORM-D
UN No.: Not Required
UN No.: N/A

14.3 IATA

UN No.: N/A
Label: Not Required
Label: Consumer Commodity
Subsidiary Risk: None
Packaging Instructions: N/A

15. REGULATORY INFORMATION

15.1 SECTION 313 SUPPLIER NOTIFICATION: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning Community Right-To-Know Act of 1986 (40 CFR 372: NONE)

15.2 TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients of this product are listed on the TSCA inventory.

15.3 WHMIS: Not regulated. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

EC HAZARD WARNING LABEL
Symbol and Classification:
Risk Phrases: Harmful if swallowed
Safety Phrases: Avoid contact with eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Keep out of reach of children. Contains: Methanol. To be disposed of as hazardous waste. Users should also refer to any local or national regulations that apply to substances or preparations of this nature.

16. OTHER INFORMATION

Keep away from heat, sparks and other sources of ignition. Do not expose to heat or temperature above 120°F. Use in well ventilated areas.

All information and data contained in this literature is believed to be accurate, however, it should not be taken as definitive for all users. All materials may present unknown hazards and should be used with caution. Improper use may cause damage to products and to individuals health. Users should thoroughly test advertised products in their application, and independently determine satisfactory results before use in large scale production or manufacturing processes.