1. Product and Company Identification

**Product Name:** Sani-Cloth Plus  
**CAS #:** Mixture  
**Product use:** Germicidal Cleaner  
**Manufacturer:** Nice-Pak Products, Inc. or PDI, The Healthcare Div. of Nice-Pak Products, Inc.  
Two Nice-Pak Park  
Orangeburg, NY 10962-1376  
Toronto, ON M9L 1V8 Canada  
Flint, United Kingdom  
Phone (USA) 1-845-365-1700 (M-F 8am - 5pm)  
Phone (CANADA) 1-800-263-7067  
Phone (United Kingdom) +44 (0) 1352-736700

<table>
<thead>
<tr>
<th>LEGEND</th>
<th>HMIS/NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>/ 2</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>B</td>
</tr>
</tbody>
</table>

2. Hazards Identification

**Emergency overview**  
CAUTION  
Hazards to humans and domestic animals. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**Potential short term health effects**

- **Routes of exposure**  
  Eye, Skin contact, Skin absorption, Inhalation.
- **Eyes**  
  Moderately irritating to the eyes.
- **Skin**  
  Overexposures may cause irritation.

**NIOSH - Pocket Guide - Skin Notations**

- Ethanol, 2-butoxy-  
  111-76-2  
  Potential for dermal absorption  
- Inhalation  
  Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.
- Ingestion  
  Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
- Target organs  
- Chronic effects  
  This product may be harmful if it is absorbed through the skin. Prolonged or repeated exposure can cause drying, defatting and dermatitis.
- **Signs and symptoms**  
  Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>67-63-0</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>111-76-2</td>
<td>1 - 4</td>
</tr>
<tr>
<td>Benzyl-C12-18-alkyldimethyl ammonium chlorides</td>
<td>68391-01-5</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, C12-18-alkyl [(ethylphenyl) methyl] dimethyl, chlorides</td>
<td>68956-79-6</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

**Composition comments**  
Active ingredients are listed above.
4. First Aid Measures

First aid procedures

Eye contact
Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact
If irritation develops, obtain medical attention.

Inhalation
If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion
Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

Notes to physician
None known.

General advice
Wear suitable protective clothing. If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties
Not flammable by OSHA criteria.

Extinguishing media
Suitable extinguishing media
Alcohol foam. Water spray or fog.

Unsuitable extinguishing media
Not available

Protection of firefighters
Specific hazards arising from the chemical
Not available

Protective equipment for firefighters
Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products
May include and are not limited to: Oxides of carbon.

Explosion data
Sensitivity to mechanical impact
Not available

Sensitivity to static discharge
Not available

6. Accidental Release Measures

Personal precautions
Wear appropriate protective equipment and clothing during clean-up.

Methods for containment
Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up
Remove sources of ignition. Pick up and discard towel.

7. Handling and Storage

Handling
Use according to package label instructions.

Storage
Keep out of reach of children. Keep away from heat, open flames or other sources of ignition. Store in a closed container away from incompatible materials.
### 8. Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>TWA: 200 ppm</td>
</tr>
<tr>
<td></td>
<td>STEL: 400 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>TWA: 400 ppm</td>
</tr>
<tr>
<td>Benzyl-C12-18-alkydimethyl ammonium chlorides</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>TWA: 20 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, C12-18-alkyl (ethylphenyl) methyl dimethyl, chlorides</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
</tbody>
</table>

**Engineering controls**
- General ventilation normally adequate.

**Personal protective equipment**
- **Eye / face protection**
  - Safety glasses
- **Hand protection**
  - Rubber gloves. Confirm with a reputable supplier first.
- **Skin and body protection**
  - As required by employer code. When using this product, wear disposable protective gloves, protective gowns, face masks, or eye coverings as appropriate when handling HIV-1, HBV or HCV infected blood or body fluids.
- **Respiratory protection**
  - Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
- **General hygiene considerations**
  - Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

### 9. Physical & Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid saturated on wipe</td>
</tr>
<tr>
<td>Color</td>
<td>Opaque white</td>
</tr>
<tr>
<td>Form</td>
<td>Pre-moistened towelette.</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild alcohol.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Physical state</td>
<td>Pre-moistened towelette.</td>
</tr>
<tr>
<td>pH</td>
<td>11 - 12 (liquid)</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limits in air, lower, % by volume</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability limits in air, upper, % by volume</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>0.88 - 1.07 (liq) (H2O = 1)</td>
</tr>
<tr>
<td>Octanol/water coefficient</td>
<td>Not available</td>
</tr>
</tbody>
</table>
10. Chemical Stability & Reactivity Information

**Chemical stability**
Stable under recommended storage conditions.

**Conditions to avoid**
Avoid high temperatures. Do not mix with other chemicals.

**Incompatible materials**

**Hazardous decomposition products**
May include and are not limited to: Oxides of carbon.

**Possibility of hazardous reactions**
Hazardous polymerization does not occur.

11. Toxicological Information

**Component analysis - LC50**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>16970 mg/l/4h rat</td>
</tr>
<tr>
<td>Benzyl-C12-18-alkyl dimethyl ammonium chlorides</td>
<td>Not available</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>2.21 mg/l/4h rat</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, C12-18-alkyl [(ethylphenyl) methyl] dimethyl, chlorides</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Component analysis - Oral LD50**

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>Not available</td>
</tr>
<tr>
<td>Benzyl-C12-18-alkyl dimethyl ammonium chlorides</td>
<td>240 mg/kg rat</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>470 mg/kg rat; 320 mg/kg rabbit</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, C12-18-alkyl [(ethylphenyl) methyl] dimethyl, chlorides</td>
<td>250 mg/kg rat</td>
</tr>
</tbody>
</table>

**Effects of acute exposure**

- **Eye**
  Moderately irritating to the eyes.
- **Skin**
  Overexposures may cause irritation.
- **Inhalation**
  Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.
- **Ingestion**
  Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
- **Sensitization**
  Non-hazardous by OSHA criteria.
- **Chronic effects**
  Non-hazardous by OSHA criteria.
- **Carcinogenicity**
  Non-hazardous by OSHA criteria.
  ACGIH - Threshold Limits Values - Carcinogens
    2-Propanol 67-63-0 A4 - Not Classifiable as a Human Carcinogen
    Ethanol, 2-butoxy- 111-76-2 A3 - Confirmed animal carcinogen with unknown relevance to humans
  IARC - Group 3 (Not Classifiable)
    2-Propanol 67-63-0 Monograph 71 [1999], Supplement 7 [1987], Monograph 15 [1977]
    Ethanol, 2-butoxy- 111-76-2 Monograph 88 in preparation
- **Mutagenicity**
  Non-hazardous by OSHA criteria.
- **Reproductive effects**
  Non-hazardous by OSHA criteria.
- **Teratogenicity**
  Non-hazardous by OSHA criteria.
12. Ecological Information

Ecotoxicity - Freshwater Algae Data
2-Propanol 67-63-0 96 Hr EC50 Scenedesmus subspicatus: >1000 mg/L; 72 Hr EC50 Scenedesmus subspicatus: >1000 mg/L

Ecotoxicity - Freshwater Fish Species Data
2-Propanol 67-63-0 96 Hr LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 94900 mg/L [flow-through] (29 days old); 96 Hr LC50 Pimephales promelas: 61200 mg/L [flow-through] (31 days old)

Ethanol, 2-butoxy- 111-76-2 96 Hr LC50 Lepomis macrochirus: 1490 mg/L [static]

Ecotoxicity - Microtox Data
2-Propanol 67-63-0 5 Min EC50 Photobacterium phosphoreum: 35390 mg/L

Ecotoxicity - Water Flea Data
2-Propanol 67-63-0 48 Hr EC50 Daphnia magna: 13299 mg/L
Ethanol, 2-butoxy- 111-76-2 24 Hr EC50 water flea: 1720 mg/L; 24 Hr LC50 Daphnia magna: 1698-1940 mg/L

Environmental effects
Aquatic toxicity
Persistence / degradability
Bioaccumulation / accumulation
Partition coefficient
Mobility in environmental media
Chemical fate information
Not available
Not available
Not available
Not available
Not available

13. Disposal Considerations

Waste codes
Disposal instructions
Review federal, provincial, and local government requirements prior to disposal. Dispose of used towelette in accordance with local regulations for infectious waste disposal.

Waste from residues / unused products
Contaminated packaging
Not available
Not available

14. Transport Information

Department of Transportation (DOT)
Not regulated as a hazardous material. Not flammable per ICAO Test Method 1.1.2.1

15. Regulatory Information

US Federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.
EPA Registration No. 9480-6

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
Ethanol, 2-butoxy- 111-76-2 1 Lb statutory RQ (no final RQ is being assigned to the generic or broad class. Includes mono- and di- ethers of ethylene glycol, diethylene glycol and triethylene glycol R-(OCH2CH2)n-OR'' where n = 1, 2 or 3, R = alkyl or aryl groups, R'' = R h or groups which when removed yield glycol ethers with the structure R-(OCH2CH2)n-OH. Polymers are excluded from glycol category); 0.454 k

U.S. - CERCLA/SARA - Section 313 - Emission Reporting
2-Propanol 67-63-0 1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
Ethanol, 2-butoxy- 111-76-2 1.0 Percent de minimis concentration (applies to R-(OCH2CH2)n-OR' ethers, where n = 1,2, or 3, R=alkyl C7 or less or R = phenyl or alkyl subst. phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate, Chemical Category N230)

Occupational Safety and Health Administration (OSHA)
29 CFR 1910.1200 hazardous chemical
Yes

CERCLA (Superfund) reportable quantity
None
Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Immediate Hazard - Yes
- Delayed Hazard - No
- Fire Hazard - No
- Pressure Hazard - No
- Reactivity Hazard - No

Section 302 extremely hazardous substance
- No

Section 311 hazardous chemical
- Yes

Clean Air Act (CAA)
- Not available

Clean Water Act (CWA)
- Not available

Safe Drinking Water Act (SDWA)
- Not available

Drug Enforcement Agency (DEA)
- Not available

Food and Drug Administration (FDA)
- Not available

Inventory status

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

State regulations

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances
- 2-Propanol 67-63-0 Present
- Ethanol, 2-butoxy-111-76-2 Present

U.S. - Illinois - Toxic Air Contaminants
- Ethanol, 2-butoxy-111-76-2 Present

U.S. - Louisiana - Reportable Quantity List for Pollutants
- Ethanol, 2-butoxy-111-76-2 100 Lb RQ

U.S. - Massachusetts - Right To Know List
- 2-Propanol 67-63-0 Present
- Ethanol, 2-butoxy-111-76-2 Present

U.S. - Minnesota - Hazardous Substance List
- 2-Propanol 67-63-0 Present
- Ethanol, 2-butoxy-111-76-2 Skin

U.S. - New Jersey - Right to Know Hazardous Substance List
- 2-Propanol 67-63-0 sn 1076; sn 2381 (strong-acid process manufacture)
- Ethanol, 2-butoxy-111-76-2 sn 0275

U.S. - Pennsylvania - RTK (Right to Know) List
- 2-Propanol 67-63-0 Environmental hazard
- Ethanol, 2-butoxy-111-76-2 Present

U.S. - Rhode Island - Hazardous Substance List
- 2-Propanol 67-63-0 Toxic; Flammable
- Ethanol, 2-butoxy-111-76-2 Toxic

16. Other Information

Disclaimer
Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Recommended use
Cleaner

Further information
Caution: Keep out of reach of children. Avoid contact with eyes and skin. Not for use on skin. Not a baby wipe. For use on hard surfaces only. Do not use on natural marble, windows, unpainted wood, brass, clear plastic or coloured grout.

Issue date
30-Mar-2007

Effective date
31-Mar-2007

Prepared by
Dell Tech Laboratories Ltd. (519) 858-5021