

MATERIAL SAFETY DATA SHEET

Apicare Antiseptic Gel Handrinse

IDENTITY (As Used on Label and List)

| Section V -- Reactivity Data | | | |
|------------------------------|----------|---|--|
| Stability | Unstable | | Conditions to Avoid Keep away from heat or ignition source. |
| | Stable | x | |

| Section I | |
|---|--|
| Manufacture's Name Apicare, Inc. | Emergency Telephone Number Chemtrek (800) 424-9300 |
| Address (Number, Street, City, and ZIP Code) 550 Research Parkway Meriden, CT 06450 | Telephone Number for Information -927 Date Prepared November 18, 2011 Signature of Preparer (optional) |

| | | | |
|--|----------------|---|-----------------------------------|
| Incompatibility (Materials to Avoid) Oxidizing agents are listed from MSDS of ingredients at greater than 1%. | | | |
| Hazardous Decomposition of Byproducts CO(2) | | | |
| Hazardous Polymerization | May Occur | | Conditions to Avoid None known |
| | Will Not Occur | x | |

| Section II -- Hazardous Ingredients/Identity Information | | | | |
|--|----------|-----------|--------------------------|--------------|
| Hazardous Components (Specific Chemical Identity; Common Names(s)) | OSHA PEL | ACGIH TLV | Other Limits Recommended | % (optional) |
| Ethyl Alcohol (Specially Denatured Alcohol 40-2) | N/A | 1000 PPM | NONE | 62 v/v |
| | | | | |
| | | | | |
| | | | | |

| Section VI -- Health Hazard Data | | | | |
|---|-------|-------------|-------|--------------------------------------|
| Route(s) of Entry: | Eyes? | Inhalation? | Skin? | Ingestion? |
| | x | N/A | x | By accidental or intentional misuse. |
| Health Hazards (Acute/Chronic) Eye irritation, drowsiness. Primary skin irritation index of 0.00, classifies this product as non-irritant and not a primary irritant to the skin since the empirical score was less than 5.00. | | | | |
| Carcinogenicity: For Product: NTP? Not evaluated IARC Monographs? Not evaluated OSHA Regulated? Not evaluated | | | | |
| Signs and Symptoms of Exposure This liquid cleanser may cause eyes to have redness, tearing, or irritation. | | | | |
| Medical Conditions Generally Aggravated by Exposure: No medical conditions are known or suspected to be aggravated. | | | | |
| Emergency and First Aid Procedures Eyes: Flush with water. Skin: If irritation develops, discontinue use and treat symptoms. Ingestion: Give a tablespoon of salt in a glass of water and repeat until vomit fluid is clear. Seek medical attention. | | | | |

| Section III -- Physical/Chemical Characteristics | | | |
|---|-------|--------------------------------------|-------|
| Boiling Point | 173°F | Specific Gravity (Water = 1) | 0.904 |
| Vapor Pressure (mm Hg.) | 40 | Melting Point | N/A |
| Vapor Density (AIR = 1) | 1.59 | Evaporation Rate (Butyl Acetate = 1) | 2.8 |
| Solubility in Water Complete | | | |
| Appearance and Odor A clear, green, viscous liquid with an alcohol odor. | | | |

| Section VII -- Precautions for Safe Handling and Use | |
|---|--|
| Steps to Be taken in Case Materials is Released or Spilled Large Spills: Eliminate all ignition sources. Liquid may be taken up on sand, clay, earth, floor absorbant or other absorbant materials and shoveled into containers Small Spills: Absorb on paper, vermiculite, floor absorbant or other absorbant materials. | |
| Waste Disposal Method Bury, incinerate or flush to sewer in accordance with all legal regulations. | |

| Section IV -- Fire and Explosion Hazard Data | | | |
|---|-------------------------------|------------|------------|
| Flash Point (Method Used) 60°F (Closed Cup) | Flammable Limits Flammable | LEL 3.3 | UEL 19% |
| Extinguishing Media No recommendations or restrictions for this product. | | | |
| Special Fire Fighting Procedures No special firefighting procedures are indicated. | | | |
| Unusual Fire and Explosion Hazards Vapors may form, travel and ignite. | | | |

| | | | |
|--|--|--|--|
| Precautions to Be taken in Handling and Storing KEEP OUT REACH OF CHILDREN. This product may cause possible drowsiness. | | | |
| Other Precautions N/A | | | |

| SECTION VIII -- CONTROL MEASURES | | | |
|---|----------------------|-----|--------------------|
| Respiratory Protection (Specify Type) No personal protective equipment needed. | | | |
| Ventilation | Local Exhaust | N/A | Special N/A |
| | Mechanical (General) | N/A | Other N/A |
| Protective Gloves | | N/A | Eye Protection N/A |
| Other Protective Clothing or Equipment | | N/A | |
| Work/Hygienic Practices | | N/A | |



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MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Chloraprep 2.0%
Formula: Mixture
MSDS Date of Preparation: November 21, 2008

CARDINAL HEALTH, INC.
11400 Tomahawk Creek Pkwy
Leawood, KS 66211
PHONE: (800) 523-0502 FAX: (913) 451-8509

EMERGENCY CONTACT: CHEMTREC 1-800-424-9300 Commercial # 1 (703) 741-6009
• This number to be used only for spills, leaks, fire, exposure or accidents. Please direct all other inquiries to Cardinal Health Customer Service at (800) 523-0502.

2. HAZARDS IDENTIFICATION

This product consists of a 70% isopropanol and 2% chlorhexidine gluconate solution.

EMERGENCY OVERVIEW
WARNING!

Flammable Liquid and Vapor. Causes severe eye irritation. May cause skin irritation. Inhalation of vapors may cause respiratory irritation and central nervous system effects such as headache, dizziness, drowsiness, nausea and unconsciousness. Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No. | Amount |
|---------------------------------|------------|--------|
| Isopropanol (Isopropyl Alcohol) | 67-63-0 | 70% |
| Chlorhexidine Gluconate | 18472-51-0 | 2% |

4. FIRST AID MEASURES

Skin: Wash material off the skin with copious amounts of water. If redness or a burning sensation develops, seek medical attention and discontinue use.
Eyes: Flush with copious amounts of water. After initial flushing remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and treated by medical personnel immediately.
Ingestion: Give individual one to two glasses of water to drink. If gastrointestinal symptoms develop, consult medical personnel. (Never give anything by mouth to an unconscious person)



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Inhalation: If symptoms of exposure develop, move to fresh air. Seek medical attention if symptoms persist.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Water fog, alcohol-resistant foam, carbon dioxide or dry chemical. Water spray can be used to cool exposed containers and structures, dilute spills and disperse flammable vapors.

Special Fire Fighting Procedures: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

Unusual Fire & Explosion Hazards: Primary solution containment may explode if exposed to extreme heat or flame. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back.

6. ACCIDENTAL RELEASE MEASURES

For small spills, wipe or mop up and rinse to sewer serviced by a wastewater treatment facility. For large spills, eliminate sources of ignition and ventilate spill area. Wear skin, eye and respiratory protection during cleanup (See Section 8). Soak up liquid with inert absorbent and collect into a suitable waste container. Wash residue from spill area with water and flush to sewer serviced by a wastewater treatment facility if permitted.

7. HANDLING AND STORAGE

Avoid prolonged exposure (ingestion, inhalation, or skin). Avoid breathing vapors. Use in well ventilated areas. Keep product away from heat, sparks and flames.

Store in a cool, dry, well-ventilated area away from incompatible chemicals and all sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

| | |
|---------------------------------|--|
| Isopropanol (Isopropyl Alcohol) | 400 ppm PEL-TWA 200 ppm TLV-TWA 400 ppm TWA-STEL |
| Chlorhexidine Gluconate | None Established |



Eye Protection: Avoid eye contact. Safety glasses or goggles recommended if eye contact is possible.
Gloves: Latex rubber for limited contact. Butyl rubber or nitrile recommended for prolonged contact.
Respiratory Protection: If the exposure limits are exceeded a NIOSH approved organic vapor respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.
Engineering Controls: Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits. Use explosion proof equipment where required.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|--------------------------|-------------------------|------------------------------|---------------------|
| Boiling Point: | N/A | Melting Point: | Unknown |
| Vapor Pressure: | N/A | Specific Gravity: | 0.880 |
| Vapor Density: | N/A | % Volatile by volume: | 100 |
| Water Solubility: | Complete | Evaporation Rate: | Unknown |
| pH | 7.0 – 7.5 | Flash point: | 67° F TCC |
| Flammable Limits: | LEL: 2.0% (isopropanol) | UEL: | 12.7% (isopropanol) |

Appearance & Odor: Product is a liquid with an alcohol odor as applied.

10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Oxidizing materials

Hazardous polymerization: Will not occur.

Hazardous decomposition products: Carbon dioxide, carbon monoxide, nitrogen oxides, ammonia, chlorine compounds.

Conditions to avoid: Extreme heat, sparks or flame.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:

Ingestion: Ingestion may cause mucous membrane and gastrointestinal irritation, abdominal pain, nausea, vomiting, dizziness and drowsiness.

Inhalation: Inhalation of vapors may cause mucous membrane and respiratory irritation and central nervous system depression with symptoms of headache, dizziness and drowsiness.

Eye: Contact may cause severe irritation with redness, tearing and pain with possible eye damage.

Skin: May cause irritation, drying, defatting of the skin. Prolonged contact may cause dermatitis.

Chronic: None known.

Carcinogenicity: None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

Medical Conditions Aggravated by Exposure: Employees with pre-existing skin, kidney and respiratory diseases may be at increased risk from exposure.

(ChloraPrep 2%) 3 of 5 Pages



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Acute Toxicity Values:

Isopropanol: Oral Rat LD50 5,045 mg/kg; Inhalation Rat LC50 16,000 ppm/8 hour; Skin Rabbit LD50 12,800 mg/kg

Chlorhexidine Gluconate: Oral Rat LD50 2,000 mg/kg

12. ECOLOGICAL INFORMATION

Isopropanol: The LC50/96-hour values for fish are over 100 mg/l.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local, state and federal environmental regulations.

14. TRANSPORT INFORMATION

DOT Information

Proper Shipping Name: Isopropanol Solution

Hazard Class: 3, PG II

UN Number: UN1219

Exemption for US Ground Transport: Consumer Commodity, ORM-D

Exemption for US Air Transport: Consumer Commodity, ORM-D-AIR

Small Quantity Exception: 49CFR173.4

IMO Information

Proper Shipping Name: Isopropanol Solution

Hazard Class: 3, PG II

UN Number: UN1219

Limited Quantity: 1 L/inner receptacle. Limit gross weight - 30 kg/package

IATA Information

Proper Shipping Name: Isopropanol Solution

Hazard Class: 3, PG II

UN Number: UN1219

Packing Instruction: 305

Limited Quantity Packing Instruction: Y305

Alternate Shipping Description: Consumer Commodity, 9, ID8000

Excepted Small Quantities of Dangerous Goods: Class 3, PG II inner limit 30 mL, Outer Package Limit 500 mL

(ChloroPrep 2%) 4 of 5 Pages



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15. REGULATORY INFORMATION

CERCLA: This product is not subject to CERCLA reporting requirements, however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA Hazard Category (311/312): Acute Health, Fire Hazard.

SARA 313: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory.

16. OTHER INFORMATION

HMIS Rating: Health = 2 Fire = 3 Reactivity = 0

ACGIH: American Conference of Governmental Industrial Hygienists
IARC: International Agency for Research on Cancer
OSHA: Occupational Safety and Health Administration
NTP: National Toxicology Program
PEL: Permissible exposure Level (OSHA)
TLV: Threshold Limit Value (ACGIH)
TWA: Time Weighted Average over 8 hours
TCC: Tagged Closed Cup

| <i>REVISION SUMMARY</i> | |
|-------------------------|---|
| CAF NUMBER | 2008-11-50 |
| REVISION | L |
| DATE | 11/08 |
| SUMMARY OF CHANGE | Update change to MSDS on # 5, deleted Ampoules and added Primary solution containment. |
| <i>REVISION SUMMARY</i> | |
| CAF NUMBER | 2008-11-17 |
| REVISION | K |
| DATE | 11/12/08 |
| SUMMARY OF CHANGE | Update company name and logo from Enturia, Inc. to Cardinal Health, Inc. throughout document. |

To view remaining history – See Rev. J.

MATERIAL SAFETY DATA SHEET

Apicare Alcohol Swabsticks

IDENTITY (As Used on Label and List)

| Section V -- Reactivity Data | | | |
|------------------------------|----------|---|------------------------------------|
| Stability | Unstable | | Conditions to Avoid None known. |
| | Stable | X | |

| Section I | |
|---|---|
| Manufacture's Name Apicare, Inc. | Emergency Telephone Number Chemtrek (800) 424-9300 |
| Address (Number, Street, City, and ZIP Code) 550 Research Parkway Meriden, CT 06450 | Telephone Number for Information 203-630-0500 |
| | Date Prepared December 18, 2009 |
| | Signature of Preparer (optional) |

| | | | |
|--|----------------|---|------------------------------------|
| Incompatibility (Materials to Avoid) Concentrated nitric and sulfuric acids, strong oxidizers, aldehydes and halogen compounds. | | | |
| Hazardous Decomposition of Byproducts N/A | | | |
| Hazardous Polymer-ization | May Occur | | Conditions to Avoid None known. |
| | Will Not Occur | X | |

| Section II -- Hazardous Ingredients/Identity Information | | | | |
|--|----------|-----------|--------------------------|--------------|
| Hazardous Components (Specific Chemical Identity; Common Names(s)) | OSHA PEL | ACGIH TLV | Other Limits Recommended | % (optional) |
| Isopropyl Alcohol (CAS #67-63-0) | 400 ppm | | | 70 |
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| Section VI -- Health Hazard Data | | | | |
|--|-------|------------------|-----------------|------------|
| Route(s) of Entry: | Eyes? | Inhalation? | Skin? | Ingestion? |
| | X | N/A | x | Unlikely |
| Health Hazards (Acute/Chronic) Slightly toxic if ingested; mildly irritating to eyes, nose and throat. | | | | |
| | | | | |
| Carcinogenicity: | NTP? | IARC Monographs? | OSHA Regulated? | |
| | No | No | No | |
| Signs and Symptoms of Exposure If large amount is ingested, stomach cramps, pain nausea, vomiting, drowsiness and diarrhea may occur. Headache may result from inhalation of an excessive amount. | | | | |
| Medical Conditions Generally Aggravated by Exposure: Unknown | | | | |
| Emergency and First Aid Procedures Eyes: Flush with plenty of water and see a doctor. Ingestion: Give a two glasses of water and induce vomiting. Inhaled: Remove to fresh air. | | | | |

| Section III -- Physical/Chemical Characteristics | | | |
|--|---|--------------------------------------|---------|
| Boiling Point | 176°F | Specific Gravity (Water = 1) | 0.878 |
| Vapor Pressure (mm Hg.) | Approx. 90 | Melting Point | N/A |
| Vapor Density (AIR = 1) | 2.1 | Evaporation Rate (Butyl Acetate = 1) | Unknown |
| Solubility in Water | Soluble. | | |
| Appearance and Odor | A clear, colorless liquid with a pungent, alcohol odor. | | |

| Section VII -- Precautions for Safe Handling and Use | |
|---|--|
| Steps to Be taken in Case Materials is Released or Spilled It is unlikely that this product, when spilled, will cause a problem; packaged as individual packets containing 2 - 8 mL of solution. | |
| Waste Disposal Method Any solution that is spilled may be wiped up with towelling and disposed of with garbage. | |

| Section IV -- Fire and Explosion Hazard Data | | | |
|--|------------------|-----|-----|
| Flash Point (Method Used) 53 F (Closed cup) | Flammable Limits | LEL | UEL |
| | | 2 | 12 |
| Extinguishing Media Dry chemical or alcohol-type foam | | | |
| Special Fire Fighting Procedures Use water to cool fire-exposed area. Water spray may be ineffective in fighting fires. | | | |
| Unusual Fire and Explosion Hazards Respiratory protection required for fire fighting personnel. Stay upwind if possible. Vapors may form, travel and ignite. | | | |

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|--|--|--|--|
| Precautions to Be taken in Handling and Storing Avoid storing in excessive heat (Greater than 104°F). | | | |
| Other Precautions None. | | | |

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| SECTION VIII -- CONTROL MEASURES | | | |
|---|----------------------|---------------|-----------------------------|
| Respiratory Protection (Specify Type) No personal protective equipment needed. | | | |
| Ventilation | Local Exhaust | X | Special N/A |
| | Mechanical (General) | N/A | Other N/A |
| Protective Gloves | | If desired | Eye Protection: If desired. |
| Other Protective Clothing or Equipment | | None required | |
| Work/Hygienic Practices | | Normal | |

MATERIAL SAFETY DATA SHEET

| | | | |
|--------------------------------------|--|-------------------------------------|---------------------|
| Apicare Skin Protectant Swabstick | | Section V -- Reactivity Data | |
| IDENTITY (As Used on Label and List) | | Stability | Conditions to Avoid |
| | | Unstable | None known. |
| | | Stable | |
| | | X | |

Section I

| | |
|---|---|
| Manufacture's Name Apicare, Inc. | Emergency Telephone Number Chemtrek (800) 424-9300 |
| Address (Number, Street, City, and ZIP Code) 550 Research Parkway Meriden, CT 06450 | Telephone Number for Information 203-630-500 |
| | Date Prepared December 15, 2006 |
| | Signature of Preparer (optional) |

| | | | |
|--|----------------|---------------------|--|
| Incompatibility (Materials to Avoid) Concentrated nitric and sulfuric acids, strong oxidizers, aldehydes and halogen compounds. | | | |
| Hazardous Decomposition of Byproducts Burning may produce carbon monoxide and carbon dioxide. | | | |
| Hazardous Polymer-ization | May Occur | Conditions to Avoid | |
| | Will Not Occur | None known. | |
| | X | | |

Section II -- Hazardous Ingredients/Identity Information

| Hazardous Components (Specific Chemical Identity; Common Names(s)) | OSHA PEL | ACGIH TLV | Other Limits Recommended | % (optional) |
|--|----------|-----------|--------------------------|--------------|
| Isopropyl Alcohol (CAS #67-63-0) | 400 ppm | | | 76.4 |
| n-Butyl Alcohol (CAS #71-36-3) | 100 ppm | | | 6.1 |

Section VI -- Health Hazard Data

| | | | | |
|--|-------|-------------|-------|------------|
| Route(s) of Entry: | Eyes? | Inhalation? | Skin? | Ingestion? |
| | X | X | X | Unlikely |
| Health Hazards (Acute/Chronic) Can be irritating to eyes, nose and throat. May cause dermatitis in some individuals after prolonged exposure. | | | | |
| Carcinogenicity: NTP? IARC Monographs? OSHA Regulated? | | | | |
| Signs and Symptoms of Exposure Irritation of eyes, nose and throat. May cause stinging of eyes and conjunctivitis. | | | | |
| Medical Conditions Generally Aggravated by Exposure: Unknown | | | | |
| Emergency and First Aid Procedures Eyes: Flush with plenty of water and see a doctor. Ingestion: Induce vomiting. | | | | |

Section III -- Physical/Chemical Characteristics

| | | | |
|---------------------------------------|---|--------------------------------------|---------|
| Boiling Point (Isopropanol) | 176°F | Specific Gravity (Water = 1) | 0.852 |
| Vapor Pressure (mm Hg.) (Isopropanol) | 90 | Melting Point | N/A |
| Vapor Density (AIR = 1) (Isopropanol) | 2.1 | Evaporation Rate (Butyl Acetate = 1) | Unknown |
| Solubility in Water | Soluble. | | |
| Appearance and Odor | A clear, colorless liquid with a pungent, alcohol odor. | | |

Section VII -- Precautions for Safe Handling and Use

| |
|---|
| Steps to Be taken in Case Materials is Released or Spilled It is unlikely that this product, when spilled, will cause a problem; packaged as individual packets containing 2 - 8 mL of solution. |
| Waste Disposal Method Any solution that is spilled may be wiped up with towelling and disposed of with garbage. |

Section IV -- Fire and Explosion Hazard Data

| | | | |
|--|------------------|-----|-----|
| Flash Point (Method Used) <74 F (Closed cup) | Flammable Limits | LEL | UEL |
| | | 2 | 12 |
| Extinguishing Media Dry chemical or alcohol-type foam | | | |
| Special Fire Fighting Procedures Use water to cool fire-exposed area. Water spray may be ineffective in fighting fires. | | | |
| Unusual Fire and Explosion Hazards Respiratory protection required for fire fighting personnel. Stay upwind if possible. Vapors may form, travel and ignite. | | | |

| |
|--|
| Precautions to Be taken in Handling and Storing Avoid storing in excessive heat (Greater than 104°F). |
| Other Precautions None. |

SECTION VIII -- CONTROL MEASURES

| | | | | |
|--|--|-----------------|-------------|-----|
| Respiratory Protection (Specify Type) | No personal protective equipment needed. | | | |
| Ventilation | Local Exhaust | X | Special | N/A |
| | Mechanical (General) | N/A | Other | N/A |
| Protective Gloves | If desired | Eye Protection: | If desired. | |
| Other Protective Clothing or Equipment | None required | | | |
| Work/Hygienic Practices | Normal | | | |