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PRODUCT: Alcohol Prep Pad

SECTION II: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits	%
Isopropanol (CAS 67-63-0)	400 ppm	400 ppm	TWA (980 mg/m³)	70% v/v

SECTION III: PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: > 160° F
Vapor Pressure (mm Hg.): 733
Vapor Density (AIR = 1): > 2.0
Specific Gravity (H₂O = 1): 0.878
Melting Point: NA – fluid at 0 C
Evaporation Rate (Butyl Acetate = 1): > 7
Solubility in Water: Soluble
Appearance and Odor: water white clear solution with characteristic isopropanol odor

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): Approximately >78 ° F (TCC)
Flammable Limits: NA
LEL: 2
UEL: 12
Extinguishing Media: Water spray, dry chemical, carbon dioxide, alcohol foam
Special Fire Fighting Procedures: NA

Unusual Fire and Explosion Hazards: -none-

SECTION V: REACTIVITY DATA

Stability

Unstable: No

Stable: Yes

Conditions to Avoid: NA

Incompatibility (Materials to Avoid): Anhydride, Isocyanate, and organometallic contamination

Hazardous Decomposition

or Byproducts: Carbon Dioxide, Carbon Monoxide

Hazardous

Polymerization

May Occur: No

Will Not Occur: Yes

Conditions to Avoid: NA

SECTION VI: HEALTH HAZARD DATA

Route(s) of Entry

Inhalation? Yes

Skin? Yes

Ingestion? Yes

Health Hazards (Acute and Chronic): Prolonged breathing of the vapors may cause coughing, shortness of breath, and intoxication. Eye contact may cause moderate, but temporary, irritation. Material can affect mucosal tissue and / or aggravate mucous membrane dysfunction. Ingestion may cause gastric distress. If swallowed, contact a **POISON CONTROL CENTER**.
KEEP OUT OF REACH OF CHILDREN.

Carcinogenicity

NTP? NA

IARC Monographs? NA

OSHA Regulated? NA

Signs and Symptoms of Exposure: Coughing, dizziness, and watery eyes.

Medical Conditions Generally

Aggravated by Exposure: Sensitive or inflamed skin may become irritated.

Emergency and First Aid Procedures: Wash affected area with water. Seek medical attention. If large quantities are swallowed, administer warm water and contact a physician or poison control center. With eye contact, flush with water. If irritation persists, contact a physician.

SECTION VII: PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled:	Eliminate all sources of ignition and flush with large quantities of water spray.
Waste Disposal Method:	Incineration. Dispose of in accordance with local, state and federal regulations.
Precautions to Be Taken in Handling and Storing:	Flammable Liquid. Keep away from ignition sources. Avoid temperatures in excess of 100 F (38 C)
Other Precautions:	KEEP OUT OF REACH OF CHILDREN

SECTION VIII: CONTROL MEASURES

Respiratory Protection (Specify Type): Organic Vapor at user discretion.

Ventilation

Local Exhaust: n/a
Mechanical
(General): n/a
Special: NA
Other: NA

Protective Gloves: n/a

Eye Protection: Goggles if using large quantities – Use eye bath if contact occurs.

Other Protective Clothing
or Equipment: NA

Work / Hygienic Practices: Good hygienic practice

INTERNATIONAL TRANSPORTATION INFORMATION

Product Class: Class 4.1 with EXEMPTION A-46

UN Number: UN 3175 Solids containing flammable liquid, n.o.s. – with EXEMPTION A-46

Package Information: PGII

A-46 Mixtures of solids which are not subject to these Regulations and Flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, provided there is no free liquid visible at the time the substance is packaged and the packaging is leak proof. Small inner packings consisting of sealed packets containing less than 10 ml of a Packing Group II or II flammable liquid absorbed into a solid material are not subject to these Regulations providing there is no free liquid in the packet.

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

2 of 2 SDS – CareFusion ChloroPrep® Solutions

1.1. Product identifier

Product name : ChloroPrep® Solutions

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Antimicrobial

1.3. Details of the supplier of the safety data sheet

CareFusion
75 N. Fairway Drive
Vernon Hills, IL 60061
T 800-523-0502 - F 855-329-6985

1.4. Emergency telephone number

Emergency number : Chemtrec 1 800 424 9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flam. Liq. 2 H225
Eye Irrit. 2A H319
STOT SE 3 H336
STOT SE 3 H335

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US) :

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting/... equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P264 - Wash ... thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P337+P313 - If eye irritation persists: Get medical advice/attention
P370+P378 - In case of fire: Use ... for extinction
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to ...

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

ChloraPrep® Clear

Name	Product identifier	%	GHS-US classification
Isopropyl alcohol	(CAS No) 67-63-0	70	Flam. Liq. 2, H225
Chlorhexidine digluconate	(CAS No) 18472-51-0	2	Acute Tox. 4 (Oral), H302

ChloraPrep® Teal Green

Name	Product identifier	%	GHS-US classification
Isopropyl alcohol	(CAS No) 67-63-0	70	Flam. Liq. 2, H225
Chlorhexidine digluconate	(CAS No) 18472-51-0	2	Acute Tox. 4 (Oral), H302
C.I. Food Green 3	(CAS No) 2353-45-9	0 - 0.1	Muta. 2, H341

ChloraPrep® Hi-Lite Orange

Name	Product identifier	%	GHS-US classification
Isopropyl alcohol	(CAS No) 67-63-0	70	Flam. Liq. 2, H225
Chlorhexidine digluconate	(CAS No) 18472-51-0	2	Acute Tox. 4 (Oral), H302
FD and C Yellow No. 6	(CAS No) 2783-94-0	0 - 0.1	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: If symptoms of exposure develop, move to fresh air. Seek medical attention if symptoms persist.
First-aid measures after skin contact	: Wash material off the skin with copious amounts of water. If redness or a burning sensation develops, seek medical attention and discontinue use.
First-aid measures after eye contact	: 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.
First-aid measures after 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).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Inhalation of vapors may cause mucous membrane and respiratory irritation and central nervous system depression with symptoms of headache, dizziness and drowsiness.
Symptoms/injuries after skin contact	: May cause irritation, drying, defatting of the skin. Prolonged contact may cause dermatitis.
Symptoms/injuries after eye contact	: Contact may cause severe irritation with redness, tearing and pain with possible eye damage.
Symptoms/injuries after ingestion	: Ingestion may cause mucous membrane and gastrointestinal irritation, abdominal pain, nausea, vomiting, dizziness and drowsiness.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable 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.
Unsuitable extinguishing media	: None.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapor. Ampoules 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.
Explosion hazard	: None known.

5.3. Advice for firefighters

Protection during firefighting : Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No special measures required.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Stop the flow of material, if this is without risk.

Methods for cleaning up : Wear skin, eye and respiratory protection during cleanup. 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. 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.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid prolonged exposure (ingestion, inhalation, or skin contact). Avoid breathing vapors. Use in well-ventilated areas. Keep product away from heat, sparks and flames.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Isopropyl alcohol (67-63-0)		
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (ppm)	400 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	980 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm

8.2. Exposure controls

Appropriate engineering controls : Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits. Use explosion proof equipment where required.

Hand protection : Latex rubber for limited contact. Butyl rubber or nitrile recommended for prolonged contact.

Eye protection : Safety glasses or goggles recommended if eye contact is possible.

Skin and body protection : Wear suitable working clothes.

Respiratory protection : If the exposure limits are exceeded a NIOSH/EN approved organic vapor respirator appropriate for the form and concentration of the contaminants should be used.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear in product; when activated, clear orange, teal

Color	: Clear, orange, or teal
Odor	: Odorless
Odor threshold	: No data available
pH	: 7 - 7.5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 67 °F
Self ignition temperature	: 2 - 12.7
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity	: 0.88
Solubility	: Water: Complete
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: 100 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Will not occur.

10.4. Conditions to avoid

Extreme heat, sparks or flame.

10.5. Incompatible materials

Oxidizing materials

10.6. Hazardous decomposition products

Carbon dioxide, carbon monoxide, nitrogen oxides, ammonia, chlorine compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
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Isopropyl alcohol (67-63-0)	
LD50 oral rat	4396 mg/kg
LD50 dermal rabbit	12800 mg/kg
LC50 inhalation rat (ppm)	16000 ppm (Exposure time: 8 h)

Chlorhexidine digluconate (18472-51-0)	
ATE (oral)	500.000 mg/kg
Skin corrosion/irritation	: Not classified

Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Isopropyl alcohol (67-63-0)	
IARC group	3 - Not classifiable

C.I. Food Green 3 (2353-45-9)	
IARC group	3 - Not classifiable

FD and C Yellow No. 6 (2783-94-0)	
IARC group	3 - Not classifiable

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness. May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Isopropyl alcohol (67-63-0)	
LC50 fishes 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	> 1000 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)
LC50 fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 other aquatic organisms 2	> 1000 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Isopropyl alcohol (67-63-0)	
Log Pow	0.05 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

In accordance with DOT

Transport document description	: UN1219 Isopropanol Solution, 3, II
UN-No.(DOT)	: 1219
DOT NA no.	: UN1219
DOT Proper Shipping Name	: Isopropanol Solution
Department of Transportation (DOT) Hazard Classes	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 4b;150

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

SECTION 15: Regulatory information

15.1. US Federal regulations

Isopropyl alcohol (67-63-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 % (only if manufactured by the strong acid process, no supplier notification)

C.I. Food Green 3 (2353-45-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Chlorhexidine digluconate (18472-51-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

FD and C Yellow No. 6 (2783-94-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. US State regulations

Isopropyl alcohol (67-63-0)	
U.S. - Massachusetts - Right To Know List	
U.S. - Minnesota - Hazardous Substance List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	

SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 2	Flammable liquids, Category 2
Muta. 2	Germ cell mutagenicity, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis

STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product