



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Chloraprep 2.0%

Formula: Mixture

MSDS Date of Preparation: April 6, 2006

MEDI-FLEX, 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 Medi-Flex Customer Service at (800) 523-0502.

2. HAZARDS IDENTIFICATION

This product consists of small glass ampule containing a clear, colorless solution of 70% isopropanol and 2% chlorhexidine gluconate inside an applicator.

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.

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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)

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: 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.

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: Clear, colorless liquid in ampoule. Product is a colorless 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.

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

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	2006-05-17
REVISION	H
DATE	05/15/06
SUMMARY OF CHANGE	Change Format to ANSI 16 pt.
<i>REVISION SUMMARY</i>	
CAF NUMBER	2005-10-63
REVISION	G
DATE	11/07/05
SUMMARY OF CHANGE	Add NFPA 704 – Health/Flammability/Reactivity.
<i>REVISION SUMMARY</i>	
CAF NUMBER	2005-01-44
REVISION	F
DATE	01/31/05
SUMMARY OF CHANGE	Spell out IPA as Isopropyl alcohol.



<i>REVISION SUMMARY</i>	
CAF NUMBER	2004-12-41
REVISION	E
DATE	12/17/04
SUMMARY OF CHANGE	Change Medi-Flex address/zip and phone/fax numbers.
<i>REVISION SUMMARY</i>	
CAF NUMBER	2004-12-20
REVISION	D
DATE	12/13/04
SUMMARY OF CHANGE	Pg. 1- Added /Commercial# 1(703) 741-6009 to Emergency Contact Information Section. Pg. 5- FLAMMABLE LIQUID, N.O.S. to IATA Proper Shipping Name Information under IATA Information section.
<i>REVISION SUMMARY</i>	
CAF NUMBER	2004-05-11
REVISION	C
DATE	05/05/04
SUMMARY OF CHANGE	Update DOT Information – Exemption: from Special Provision code 47... to ORM-D Material – Consumer Commodity and delete Air/Rail Transport...
<i>REVISION SUMMARY</i>	
CAF NUMBER	2004-01-24
REVISION	B
DATE	01/15/04
SUMMARY OF CHANGE	Logo update, change from Medi-Flex Hospital Products to Medi-Flex, Inc.
<i>REVISION SUMMARY</i>	
CAF NUMBER	2001-08-02
REVISION	A
DATE	08/01/01
SUMMARY OF CHANGE	Original document.