Material Name: Gut Solution SDS ID: COV-021

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

#### **Material Name**

**Gut Solution** 

#### **Product Use**

Used with sutures

#### **Restrictions on Use**

For use under medical supervision only.

### **Manufacturer Information**

Covidien, LP

15 Hampshire Street

Mansfield, MA 02048

USA

Phone: +1-(508) 261-8000 (Monday - Friday 8:00 am to 5:00 pm)

Email: customerservice@medtronic.com

Emergency Telephone Number:

CHEMTREC (800) 424-9300 (for US and Canada)

1(703) 527-3887 (Outside US and Canada)

Collect calls accepted

### Section 2 - HAZARDS IDENTIFICATION

### Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Flammable Liquids - Category 2

Serious Eye Damage/Eye Irritation - Category 2A

Skin Sensitization - Category 1A

Reproductive Toxicity - Category 2

Specific Target Organ Toxicity - Single Exposure - Category 1 (central nervous system, kidneys,

systemic toxicity)

Specific Target Organ Toxicity - Single Exposure - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 1 (Hematopoietic System)

Specific Target Organ Toxicity - Repeated Exposure - Category 2 ( Cardiovascular

system, liver, spleen, respiratory system)

#### **GHS Label Elements**

#### Symbol(s)







**Signal Word** Danger

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## **Hazard Statement(s)**

Highly flammable liquid and vapor

Causes serious eye irritation

May cause allergic skin reaction

Suspected of damaging fertility or the unborn child

Causes damage to organs

May cause respiratory irritation. May cause drowsiness or dizziness

Causes damage to organs through prolonged or repeated exposure

May cause damage to organs through prolonged or repeated exposure

## **Precautionary Statement(s)**

#### **Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Keep container tightly closed

Keep away from heat/sparks/open flame/hot surfaces - No smoking

Ground/Bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

Take precautionary measures against static discharge

Use only non-sparking tools

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapours/spray

Wash thoroughly after handling

Contaminated work clothing must not be allowed out of the workplace

Do not eat, drink or smoke when using this product

#### Response

In case of fire: Use appropriate media to extinguish

If exposed: Call a POISON CENTER or doctor/physician

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with

water/shower

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

Specific treatment (see label)

#### **Storage**

Store in a well-ventilated place. Keep container tightly closed

Keep cool

Store locked up

## **Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations

## **Other Hazards**

No additional information available.

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# Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent (%)
67-63-0	Isopropanol	> 85
102-71-6	Triethanolamine	< 2
7732-18-5	Water	< 15

## Section 4 - FIRST AID MEASURES

#### Inhalation

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.

#### Skin

Remove/Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation or rash occurs, seek medical advice/attention.

## **Eyes**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

## **Ingestion**

Do NOT induce vomiting. If swallowed, get medical attention.

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

### **Most Important Symptoms/Effects**

#### Acute

Causes serious eye irritation. May cause allergic skin reaction. Causes damage to central nervous system, kidneys, and systemic toxicity. May cause respiratory irritation. May cause drowsiness or dizziness.

#### Delaved

Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure: Hematopoietic System. May cause damage to organs through prolonged or repeated exposure: Cardiovascular system, liver, spleen, respiratory system.

## Section 5 - FIRE FIGHTING MEASURES

## **Extinguishing Media**

# **Suitable Extinguishing Media**

Dry chemical, foam or carbon dioxide.

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# **Unsuitable Extinguishing Media**

None reported.

## **Special Hazards Arising from the Chemical**

Highly flammable liquid and vapor. Beware of reignition. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flashback.

#### **Hazardous Combustion Products**

Oxides of carbon, oxides of nitrogen

## **Fire Fighting Measures**

Move container from fire area if it can be done without risk. Stay upwind and keep out of low areas. Avoid inhalation of material or combustion by-products. Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

# Section 6 - ACCIDENTAL RELEASE MEASURES

## **Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

## Methods and Materials for Containment and Cleaning Up

Absorb with earth, sand or other non-combustible material and transfer to container. Wear protective gloves/protective clothing/eye protection/face protection. Remove all sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry.

### **Environmental Precautions**

Avoid release to the environment.

### Section 7 - HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product.

### Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Keep away from heat and ignition sources. Keep away from incompatible materials.

### **Incompatible Materials**

Acids, strong oxidizing agents, halogens, aluminum, acid anhydrides, Coatings, plastic, rubber

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# Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

# **Component Exposure Limits**

Isopropanol	67-63-0	
ACGIH:	200 ppm TWA	
	400 ppm STEL	
NIOSH:	400 ppm TWA; 980 mg/m3 TWA	
	500 ppm STEL; 1225 mg/m3 STEL	
	2000 ppm IDLH (10% LEL)	
OSHA (US):	400 ppm TWA; 980 mg/m3 TWA	
Mexico:	400 ppm TWA LMPE-PPT; 980 mg/m3 TWA LMPE-PPT	
	500 ppm STEL [LMPE-CT]; 1225 mg/m3 STEL [LMPE-CT]	
Triethanolamine	102-71-6	
ACGIH:	5 mg/m3 TWA	

## **Biological limit value**

There are no biological limit values for any of this product's components.

### **Engineering Controls**

Provide for sufficient ventilation. Ensure compliance with applicable exposure limits.

## Individual Protection Measures, such as Personal Protective Equipment

## **Eye/face protection**

Wear safety glasses with side-shields.

# **Skin Protection**

Wear appropriate work clothing.

## **Respiratory Protection**

In case of inadequate ventilation wear respiratory protection.

### **Glove Recommendations**

Wear appropriate chemical resistant gloves. Do not wear gloves made of polyvinyl alcohol (PVA).

### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colorless liquid	Physical State	Liquid
Odor	Alcohol	Color	Colorless
<b>Odor Threshold</b>	Not available	рН	Not available

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<b>Melting Point</b>	Not available	<b>Boiling Point</b>	87 °C (188.6 °F)
Freezing point	Not available	Evaporation Rate	2 (reference as n-butyl acetate=1)
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Autoignition	Not available	Flash Point	11 °C (53 °F)
Lower Explosive Limit	2 %	Decomposition	Not available
Upper Explosive Limit	12 %	Vapor Pressure	25 (20 °C)
Vapor Density (air=1)	>1	Specific Gravity (water=1)	0.82
Water Solubility	Completely soluble	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available		

#### **Other Information**

No additional information available.

### Section 10 - STABILITY AND REACTIVITY

### Reactivity

No reactivity hazard is expected.

## **Chemical Stability**

Stable under normal conditions of use.

## **Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

### **Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid shock. Take precautionary measures against static discharge. Avoid contact with incompatible materials.

## **Incompatible Materials**

Acids, strong oxidizing agents, halogens, aluminum, acid anhydrides, Coatings, plastic, rubber

## Hazardous decomposition products

Oxides of carbon, oxides of nitrogen

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#### Section 11 - TOXICOLOGICAL INFORMATION

# **Information on Likely Routes of Exposure**

#### Inhalation

May cause respiratory irritation. May cause drowsiness or dizziness.

#### **Skin Contact**

May cause allergic skin reaction.

#### **Eye Contact**

Causes serious eye irritation.

#### Ingestion

No information on significant adverse effects.

#### **Acute and Chronic Toxicity**

### **Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Isopropanol (67-63-0)

Oral LD50 Rat 5045 mg/kg (Safety Data Sheet)

Dermal LD50 Rabbit 12800 mg/kg (Safety Data Sheet)

Inhalation LC50 Rat 1600 ppm 4 h (Safety Data Sheet)

Triethanolamine (102-71-6)

Oral LD50 Rat >5000 mg/kg (Safety Data Sheet)

Dermal LD50 Rabbit >2000 mg/kg (Safety Data Sheet)

## **Immediate Effects**

Causes serious eye irritation. May cause allergic skin reaction. Causes damage to central nervous system, kidneys, and systemic toxicity. May cause respiratory irritation. May cause drowsiness or dizziness.

#### **Delayed Effects**

Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure: Hematopoietic System. May cause damage to organs through prolonged or repeated exposure: Cardiovascular system, liver, spleen, respiratory system.

#### **Irritation/Corrosivity Data**

Causes serious eye irritation. May cause respiratory irritation.

# **Respiratory Sensitization**

No data available

#### **Dermal Sensitization**

May cause allergic skin reaction.

**Component Carcinogenicity** 

Isopropanol	67-63-0	
ACGIH:	A4 - Not Classifiable as a Human Carcinogen	
IARC:	Monograph 71 [1999]; Supplement 7 [1987]; Monograph 15 [1977] (Group 3 (not classifiable))	
Triethanolamine	102-71-6	

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IARC: Monograph 77 [2000] (Group 3 (not classifiable))

# **Germ Cell Mutagenicity**

No data available.

## **Reproductive Toxicity**

Suspected of damaging fertility or the unborn child.

# **Specific Target Organ Toxicity - Single Exposure**

Central Nervous System, kidneys, systemic toxicity

## **Specific Target Organ Toxicity - Repeated Exposure**

Hematopoietic System, Cardiovascular system, liver, spleen, respiratory system

## **Aspiration hazard**

No data available.

# **Medical Conditions Aggravated by Exposure**

May cause allergic skin reaction. Repeated exposure may cause dermititis.

#### **Additional Data**

No additional information available.

### Section 12 - ECOLOGICAL INFORMATION

## **Ecotoxicity**

Avoid release to the environment.

**Component Analysis - Aquatic Toxicity** 

component imagins inquate 10 menty		
Isopropanol	67-63-0	
Fish:	LC50 96 h Pimephales promelas 9640 mg/L [flow-through]; LC50 96 h Pimephales promelas 11130 mg/L [static]; LC50 96 h Lepomis macrochirus >1400000 μg/L	
Algae:	EC50 96 h Desmodesmus subspicatus >1000 mg/L IUCLID; EC50 72 h Desmodesmus subspicatus >1000 mg/L IUCLID	
Invertebrate:	EC50 48 h Daphnia magna 13299 mg/L IUCLID	
Triethanolamine	102-71-6	
Fish:	LC50 96 h Pimephales promelas 10600 - 13000 mg/L [flow-through]; LC50 96 h Pimephales promelas >1000 mg/L [static]; LC50 96 h Lepomis macrochirus 450 - 1000 mg/L [static]	
Algae:	EC50 72 h Desmodesmus subspicatus 216 mg/L IUCLID; EC50 96 h Desmodesmus subspicatus 169 mg/L IUCLID	

### **Persistence and Degradability**

Isopropanol: Readily degraded in water.

## **Bioaccumulative Potential**

No information available for the product.

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**Mobility** 

Isopropanol: Expected to have high mobility in soil.

**Bioconcentration** 

Isopropanol: Low bioconcentration, BCF: 3.

**Other Toxicity** 

No additional information available.

### Section 13 - DISPOSAL CONSIDERATIONS

## **Disposal Methods**

Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001.

#### Section 14 - TRANSPORT INFORMATION

**US DOT Information:** 

**Shipping Name:**Flammable liquid, n.o.s. (isopropyl alcohol)

Hazard Class: 3 UN/NA #: UN1993 Packing Group: II Required Label(s): 3

Additional information: No additional information available

**IATA Information:** 

**Shipping Name:**Flammable liquid, n.o.s. (isopropyl alcohol)

Hazard Class: 3 UN#: UN1993 Packing Group: II Required Label(s): 3

Additional information: Consult current IATA regulations prior to shipping by air

**IMDG Information:** 

**Shipping Name:**Flammable liquid, n.o.s. (isopropyl alcohol)

Hazard Class: 3 UN#: UN1993 Packing Group: II Required Label(s): 3

**Additional information:** No additional information available

**TDG Information:** 

**Shipping Name:**Flammable liquid, n.o.s. (isopropyl alcohol)

Hazard Class: 3 UN#: UN1993 Packing Group: II

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**Required Label(s):** 3

Additional information: No additional information available

### Section 15 - REGULATORY INFORMATION

#### **U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b).

Isopropanol	67-63-0
SARA 313:	1 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

## Not listed under California Proposition 65

## **Canadian WHMIS Ingredient Disclosure List (IDL)**

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Isopropanol	67-63-0
	1 %
Triethanolamine	102-71-6
	1 %

### Section 16 - OTHER INFORMATION

## **Summary of Changes** New SDS: May 6, 2015

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C -Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP -Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH -Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts<sup>TM</sup> - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH -Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States; WHMIS - Workplace Hazardous Materials Information

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# **Other Information**

#### **Disclaimer:**

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