Kit SDS Cover Sheet

Doc. ID: 64115-75: Rev. AJ
Revised (year/month/day) 2011/11/23

Product Information

Product Name	Hemoccult®SENSA® Developer
Part Number	395035, 64000, 64115, 64130, 64151, 64152, 64200, 65940
Series Name	64000 Series
Additional Product Information	If Developer expiration date is May 2012 or earlier, use Part A of SDS. If Developer expiration date is June 2012 or later, use Part B of the SDS. The US OSHA and WHMIS hazard classification in Section 3 does not apply for EU.

Components

Description
Hemoccult®SENSA®Developer (Part A)
Hemoccult®SENSA®Developer (Part B)

Transport Information

Shipping Information	Shipping Name	Alcohols, n.o.s. (Ethanol, Isopropanol solution)
	UN/ID Number	1987
	Packing Group	II
IATA	Hazard Class	3 Flammable Liquids
	Subsidiary Risk	None
	Special Provisions	A3
	IATA ERG Code	3L
IMDG	Hazard Class	3 Flammable liquids
	Subsidiary Risk	None
	Special Provisions	274
	Marine Pollutant	No
US DOT	Hazard Class	3 Flammable liquid
	Subsidiary Risk	None
	Special Provisions	173.150
	NAERG Number	127
European ADR	ADR Classification	3 Flammable Liquids
	Classification Code	F1
	Subsidiary Risk	None
Canadian TDG	PIN	1987
	TDG Classification	3 Flammable Liquids
	Subsidiary Risk	None

Transport Information (Continued)

	Special Provisions	16
	NAERG Number	127

BECKMAN COULTER

SAFETY DATA SHEET

Hemoccult®SENSA® Developer
Doc. ID: 64115-75 AJ
Revised (year/month/day) 2011/11/23

Section 1 Company and Product Identification

Product Name	Hemoccult®SENSA®Developer (Part A)
Part Number	Component of P/N 395035, 64000, 64115, 64130, 64151, 64152, 64200, 65940
Product Use	For In Vitro Diagnostic Use. See product literature for details.
Series Name	64000 Series
Manufacturer	Beckman Coulter, Inc. 250 S. Kraemer Blvd Brea, CA 92821, U.S.A. Tel: 800-854-3633 **E-mail**: SDSNT@beckman.com
EC REP Address	Beckman Coulter Ireland Inc. Mervue Business Park Mervue, Galway, Ireland Tel: 353 91 774068
Distributor and Emergency Phone No.	Refer to attached list, Document ID: 472050, for local distributor and emergency phone numbers. Chemtrec Emergency Tel No. U.S.A. 800-424-9300, International (001) 703-527-3887 (24 Hours)

Section 2 Hazards Identification

Emergency Overview	**Colorless; Clear; Liquid; Alcohol odor** **Flammable liquid and vapor.** **CNS depressant. Eye, skin and respiratory tract irritant.** **Harmful by inhalation, in contact with skin and if swallowed.** **Potential sensitizer.**
Physical Hazards	Vapors of flammable ingredients are heavier than air and may travel to an ignition source, ignite and flash back.
Potential Health Effects Summary	May cause eye, skin and respiratory tract irritation and central nervous system depression with headache, dizziness, nausea and unconsciousness. Harmful by inhalation, in contact with skin and if swallowed. Potential sensitizer. See Section 11 Toxicological Information for more detailed health information.
Potential Environmental Effects	Not available

Product Hazard Classifications	**EU:**	**US OSHA:**	**WHMIS:**
	F;R11 Xn;R20/21/22	Hazardous	Exempt

Section 2 Hazards Identification (Continued)

Label Elements

Classification as per EC Directives (1999/45/EC and 67/548 EEC)

Risk and Safety Phrases

Highly flammable
F

Harmful
Xn

R11 Highly flammable.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
S16 Keep away from sources of ignition - No smoking.
S36/37 Wear suitable protective clothing and gloves.

Other Hazard None identified.

Section 3 Composition and Information on Ingredients

Hazardous Ingredients:		Hazard Classification of Pure Ingredients		
Chemical Name	**% by wt.**	**EU**	**WHMIS**	**US OSHA**
Ethanol-methanol mix CAS # 8013-52-3 EINECS # Not available Index # Not available	<95	F;R11 Xn;R20/21/22-68/20/21/22 Flam. Liq. 2;H225 Acute Tox. Oral 4;H302 Acute Tox. Skin 4;H312 Acute Tox. Inhal. 4;H332 STOT SE 2;H371	B2; D2B	Flammable Irritant Toxic
Ethyl Paraben CAS # 120-47-8 EINECS # 204-399-4 Index # Not available	< 5	No	D2B	Irritant Sensitizer
Hydrogen Peroxide CAS # 7722-84-1 EINECS # 231-765-0 Index # 008-003-00-9	<2	O;R5-8 C;R35-20/22 Ox. Liq. 1;H271 Acute Tox. Oral 4;H302 Acute Tox. Inhal. 4;H332 Eye Dam. 1;H318 STOT SE 3;H335 Skin Corr. 1A;H314	C; E	Oxidizer Corrosive

See Section 15 Regulatory Information for additional information on hazard classifications.
See Section 16 for Risk Phrases and WHMIS Classification Description.

Section 4 First Aid Measures

Inhalation	If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.
Eye Contact	If product enters eyes, wash eyes gently under running water for 15 minutes or longer, making sure that the eyelids are held open. If pain or irritation occur, obtain medical attention.
Skin Contact	In case of skin contact, flush with copious amounts of water for at least 15 minutes. If pain or irritation occur, obtain medical attention.
Ingestion	If ingested, wash mouth out with water. If irritation or discomfort occurs, seek medical attention.

Section 5 Fire Fighting Measures

Flammable Properties	Flammable liquid and vapor.
Extinguishing Media	Use extinguishing media suitable for surrounding fire.
Special Fire and Explosion Hazards	Vapors form explosive mixtures with air. Vapors are heavier than air; fire may flash from ignition source back along vapor trail.
Hazardous Combustion Products	Depending upon fire conditions, combustion products may range from irritants and asphyxiants to acutely toxic gases.
Protective Equipment for Firefighters	Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

Section 6 Accidental Release Measures

Personal Precautions	Use good laboratory procedures; avoid eye and skin contact.
Spill and Leak Procedures	Absorb spilled material with an appropriate inert, non-flammable absorbent and dispose according to local regulations.
Environmental Precautions	Contain spill to prevent migration.

Section 7 Handling and Storage

Handling Precautions	Use good laboratory procedures; avoid eye and skin contact.
Recommended Storage Conditions	To maintain efficacy, store according to the instructions in the product labeling. Keep away from incompatible material (see Section 10).

Section 8 Exposure Controls and Personal Protection

Exposure Limits

US OSHA:

Hydrogen Peroxide CAS # 7722-84-1	1 ppm TWA; 1.4 mg/m3 TWA

Section 8 Exposure Controls and Personal Protection (Continued)

ACGIH:

Hydrogen Peroxide CAS # 7722-84-1	1 ppm TWA

DFG MAK:

Hydrogen Peroxide CAS # 7722-84-1	0.5 ppm MAK; 0.71 mg/m3 MAK; 0.5 ppm Peak; 0.71 mg/m3 Peak

Ireland

Hydrogen Peroxide CAS # 7722-84-1	1 ppm TWA; 1.5 mg/m3 TWA; 2 ppm STEL; 3 mg/m3 STEL

NIOSH

Hydrogen Peroxide CAS # 7722-84-1	75 ppm IDLH; 1 ppm TWA; 1.4 mg/m3 TWA

Japan	None established
Engineering Controls	No special engineering controls are required. Use with good general ventilation.
Respiratory Protection	Under normal conditions, the use of this product should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.
Eye Protection	Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.
Skin Protection	Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

Section 9 Physical and Chemical Properties

Physical State	Liquid	**Vapor Density**	1.6 (air=1)
Color	Colorless	**Specific Gravity (Water=1.0)**	0.8 @20°C
Transparency	Clear	**Solubility**	
Odor	Alcohol odor	**Water**	Soluble
pH	Not available	**Organic**	Not available
Freezing Point	Not available	**Viscosity**	Not available
Boiling Point	78°C (172.4°F)	**Coefficient of Water/Oil Distribution**	Not available
Flash Point	13°C (55.4°F)	**Autoignition Temp.**	Not available
Evaporation Rate	Not available	**Decomposition Temperature**	Not available

Section 9 Physical and Chemical Properties (Continued)

Flammability (Solid, Gas)	Not applicable	**Percent Volatiles**	Not available
Flammable Limits	Not available	**Vapor Pressure**	40 mm Hg @25°C
Oxidizing Properties	Not applicable	**Odor Threshold**	Not applicable

Section 10 Stability and Reactivity

Stability
Stable under normal temperatures and pressures.

Hazardous Incompatibilities
Strong acids
Strong bases
Strong oxidizers

Hazardous Decomposition Products
No decomposition products posing significant hazards would be expected from this product.

Conditions to Avoid
Avoid contact with incompatible materials.

Section 11 Toxicological Information

Toxicity Data for Hazardous Ingredients

Ethyl Paraben CAS # 120-47-8	Oral LD50 Mouse 3 g/kg
Hydrogen Peroxide CAS # 7722-84-1	Inhalation LC50 Rat 2 mg/L 4 h; Oral LD50 Rat 801 mg/kg; Dermal LD50 Rat 4060 mg/kg; Dermal LD50 Rabbit 2000 mg/kg

Primary Routes of Exposure
Eye contact, ingestion, inhalation, and skin contact.

Potential Effects of Acute Exposure
May cause irritation or burning of skin and eyes by contact. Inhalation and ingestion of large volumes may cause burning of mucous membrane, respiratory irritation, and central nervous system depression.
Harmful by inhalation, in contact with skin and if swallowed.

Potential Effects of Chronic Exposure
Chronic exposure may result in effects similar to those described for acute exposure. Frequent or long-term contact may dry out the skin resulting in dermatitis.
Repeated exposure may result in allergic reactions.

Symptoms of Overexposure
Symptoms of overexposure may include: throat irritation and coughing; dry, red, cracked skin; red irritated eyes; headache, drowsiness, dizziness, stupor; convulsions and coma.

Conditions Aggravated by Exposure
Individuals with eye and skin disorders may find these conditions aggravated by exposure to this product.
Individuals with eye, kidney, liver and cardiovascular, nervous and respiratory system disorders may find these conditions aggravated by exposure to this product.

Irritation/Sensitization
May cause sensitization by inhalation and skin contact.

Carcinogenicity
No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 67/548/EEC Annex I.

Mutagenicity
None identified.

Section 11 Toxicological Information (Continued)

Reproductive Toxicity	Reproductive effects have been reported in animal studies.
Other Effects	None identified.

Section 12 Ecological Information

Ecotoxicity

Fresh Water Species

Hydrogen Peroxide CAS # 7722-84-1	96 Hr LC50 Pimephales promelas: 16.4 mg/L; 96 Hr LC50 Lepomis macrochirus: 18-56 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 10.0-32.0 mg/L [static]

Microtox No information available.

Water Flea

Hydrogen Peroxide CAS # 7722-84-1	24 Hr EC50 Daphnia magna: 7.7 mg/L; 48 Hr EC50 Daphnia magna: 18 - 32 mg/L [Static]

Fresh Water Algae

Hydrogen Peroxide CAS # 7722-84-1	72 Hr EC50 Chlorella vulgaris: 2.5 mg/L

Biodegradability	No information available.
Bioaccumulation	No information available.
Mobility	No information available.
Other Adverse Effects	No information available.

Section 13 Disposal Considerations

Waste Disposal	Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.

Section 14 Transport Information

Shipping Information	Shipping Name	Alcohols, n.o.s. (Ethanol methanol solution)
	UN/ID Number	1987
	Packing Group	II
IATA	Hazard Class	3 Flammable Liquids
	Subsidiary Risk	None
	Special Provisions	A3
	IATA ERG Code	3L
IMDG	Hazard Class	3 Flammable liquids
	Subsidiary Risk	None
	Special Provisions	274
	Marine Pollutant	No
US DOT	Hazard Class	3 ORM-D Consumer Commodity
	Subsidiary Risk	None

Section 14 Transport Information (Continued)

	Special Provisions	173.150
	NAERG Number	127
European ADR	ADR Classification	3 Flammable Liquids
	Classification Code	F1
	Subsidiary Risk	None
Canadian TDG	PIN	1987
	TDG Classification	3 Flammable Liquids
	Subsidiary Risk	None
	Special Provisions	16
	NAERG Number	127

Section 15 Regulatory Information

US Federal and State Regulations

SARA 313	No ingredients listed.
CERCLA RG's, 40 CFR 302.4	No ingredients listed.
California Proposition 65	No ingredients listed.
Massachusetts MSL	Hydrogen Peroxide is listed.
New Jersey Dept. of Health RTK List	Hydrogen Peroxide is listed.
Pennsylvania RTK	Hydrogen Peroxide is listed.

Canada

This product is exempt from WHMIS label and SDS requirements.

PIN:	1987
Ingredients on Ingredient Disclosure List:	Hydrogen Peroxide
Ingredients with unknown toxicological properties:	Product is exempt

Some hazardous ingredients listed in Section 15 are below OSHAs and WHMIS' 1.0% w/w (0.1% for carcinogens) or EU's ingredient specific concentrations required for reporting in Section 3.

Section 16 Other Information

Beckman Coulter Safety Rating	**Flammability (Section V): 3** **Health (Section XI): 2** **Reactivity with Water (Section X): 2** **Contact (Section VIII): 2**	Code 0=none 1=slight 2=caution 3=severe
Revision Changes	Update of product hazard classification for EU.	
Hazard Class and Phrases Description From Section 3	C - Corrosive F - Highly flammable O - Oxidising Xn - Harmful R11 Highly flammable. R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. R68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed. R35 Causes severe burns. R20/22 Harmful by inhalation and if swallowed. R5 Heating may cause an explosion. R8 Contact with combustible material may cause fire. B2 - Flammable and Combustible Material: Flammable Liquid C - Oxidizing Material D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Chronic Toxic Effects) D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Skin sensitization) D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Skin or Eye Irritation) E - Corrosive Material Acute Tox. Skin 4 - Acute Toxicity Dermal, Category 4 Acute Tox. Inhal. 4 - Acute Toxicity Inhalation, Category 4 Acute Tox. Oral 4 - Acute Toxicity Oral, Category 4 Eye Dam. 1 - Eye Damage Category 1 Flam. Liq. 2 - Flammable Liquids, Category 2 Ox. Liq. 1 - Oxidizing Liquids Category 1 Skin Corr. 1A - Skin Corrosion Category 1A STOT SE 2 - Specific Target Organ Toxicity Single Exposure Category 2 STOT SE 3 - Specific Target Organ Toxicity Single Exposure Category 3 H225 Highly flammable liquid and vapour. H271 May cause fire or explosion; strong oxidiser. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H332 Harmful if inhaled. H335 May cause respiratory irritation. H371 May cause damage to organs.	
This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.		
For further information, please contact your local Beckman Coulter representative.		

SAFETY DATA SHEET

Hemoccult®SENSA® Developer
Doc. ID: 64115-75 AJ
Revised (year/month/day) 2011/11/23

Section 1 Company and Product Identification

Product Name	Hemoccult®SENSA®Developer (Part B)
Part Number	Component of P/N 395035, 64000, 64115, 64130, 64151, 64152, 64200, 65940
Product Use	For In Vitro Diagnostic Use. See product literature for details.
Series Name	64000 Series
Manufacturer	Beckman Coulter, Inc. 250 S. Kraemer Blvd Brea, CA 92821, U.S.A. Tel: 800-854-3633 **E-mail**: SDSNT@beckman.com
EC REP Address	Beckman Coulter Ireland Inc. Mervue Business Park Mervue, Galway, Ireland Tel: 353 91 774068
Distributor and Emergency Phone No.	Refer to attached list, Document ID: 472050, for local distributor and emergency phone numbers. Chemtrec Emergency Tel No. U.S.A. 800-424-9300, International (001) 703-527-3887 (24 Hours)

Section 2 Hazards Identification

Emergency Overview	**Colorless; Clear; Liquid; Alcohol odor** **Flammable liquid and vapor.** **CNS depressant. Eye, skin and respiratory tract irritant.** **Potential sensitizer.**
Physical Hazards	Vapors of flammable ingredients are heavier than air and may travel to an ignition source, ignite and flash back.
Potential Health Effects Summary	May cause eye, skin and respiratory tract irritation and central nervous system depression with headache, dizziness, nausea and unconsciousness. Potential sensitizer. See Section 11 Toxicological Information for more detailed health information.
Potential Environmental Effects	Not available

Product Hazard Classifications	**EU:**	**US OSHA:**	**WHMIS:**
	F;R11	Hazardous	Exempt

Section 2 Hazards Identification (Continued)

Label Elements

Classification as per EC Directives (1999/45/EC and 67/548 EEC)

Risk and Safety Phrases

Highly flammable

F

R11 Highly flammable.

S16 Keep away from sources of ignition - No smoking.

S7 Keep container tightly closed.

Other Hazard None identified.

Section 3 Composition and Information on Ingredients

Hazardous Ingredients:		Hazard Classification of Pure Ingredients		
Chemical Name	**% by wt.**	**EU**	**WHMIS**	**US OSHA**
Ethyl Alcohol CAS # 64-17-5 EINECS # 200-578-6 Index # 603-002-00-5	<85	F;R11 Flam. Liq. 2;H225	B2; D2A; D2B	Flammable Irritant
Isopropyl Alcohol CAS # 67-63-0 EINECS # 200-661-7 Index # 603-117-00-0	<5	F;R11 Xi;R36-67 Flam. Liq. 2;H225 Eye Irrit. 2A;H319 STOT SE 3;H336	B2; D2B	Flammable Irritant
Ethyl Paraben CAS # 120-47-8 EINECS # 204-399-4 Index # Not available	< 5	No	D2B	Irritant Sensitizer
Hydrogen Peroxide CAS # 7722-84-1 EINECS # 231-765-0 Index # 008-003-00-9	< 2	O;R5-8 C;R35-20/22 Ox. Liq. 1;H271 Acute Tox. Oral 4;H302 Acute Tox. Inhal. 4;H332 Eye Dam. 1;H318 STOT SE 3;H335 Skin Corr. 1A;H314	C; E	Oxidizer Corrosive

See Section 15 Regulatory Information for additional information on hazard classifications.
See Section 16 for Risk Phrases and WHMIS Classification Description.

Section 4 First Aid Measures

Inhalation If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.

Section 4 First Aid Measures (Continued)

Eye Contact	If product enters eyes, wash eyes gently under running water for 15 minutes or longer, making sure that the eyelids are held open. If pain or irritation occur, obtain medical attention.
Skin Contact	In case of skin contact, flush with copious amounts of water for at least 15 minutes. If pain or irritation occur, obtain medical attention.
Ingestion	If ingested, wash mouth out with water. If irritation or discomfort occurs, seek medical attention.

Section 5 Fire Fighting Measures

Flammable Properties	Flammable liquid and vapor.
Extinguishing Media	Use extinguishing media suitable for surrounding fire.
Special Fire and Explosion Hazards	Vapors form explosive mixtures with air. Vapors are heavier than air; fire may flash from ignition source back along vapor trail.
Hazardous Combustion Products	Depending upon fire conditions, combustion products may range from irritants and asphyxiants to acutely toxic gases.
Protective Equipment for Firefighters	Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

Section 6 Accidental Release Measures

Personal Precautions	Use good laboratory procedures; avoid eye and skin contact.
Spill and Leak Procedures	Absorb spilled material with an appropriate inert, non-flammable absorbent and dispose according to local regulations.
Environmental Precautions	Contain spill to prevent migration.

Section 7 Handling and Storage

Handling Precautions	Use good laboratory procedures; avoid eye and skin contact.
Recommended Storage Conditions	To maintain efficacy, store according to the instructions in the product labeling. Keep away from incompatible material (see Section 10).

Section 8 Exposure Controls and Personal Protection

Exposure Limits

US OSHA:

Ethyl Alcohol CAS # 64-17-5	1000 ppm TWA; 1900 mg/m3 TWA
Isopropyl Alcohol CAS # 67-63-0	400 ppm TWA; 980 mg/m3 TWA
Hydrogen Peroxide CAS # 7722-84-1	1 ppm TWA; 1.4 mg/m3 TWA

Section 8 Exposure Controls and Personal Protection (Continued)

ACGIH:

Ethyl Alcohol CAS # 64-17-5	1000 ppm STEL
Isopropyl Alcohol CAS # 67-63-0	400 ppm STEL; 200 ppm TWA
Hydrogen Peroxide CAS # 7722-84-1	1 ppm TWA

DFG MAK:

Ethyl Alcohol CAS # 64-17-5	500 ppm MAK; 960 mg/m3 MAK; 1000 ppm Peak; 1920 mg/m3 Peak
Isopropyl Alcohol CAS # 67-63-0	200 ppm MAK; 500 mg/m3 MAK; 400 ppm Peak; 1000 mg/m3 Peak
Hydrogen Peroxide CAS # 7722-84-1	0.5 ppm MAK; 0.71 mg/m3 MAK; 0.5 ppm Peak; 0.71 mg/m3 Peak

Ireland

Ethyl Alcohol CAS # 64-17-5	1000 ppm TWA; 1900 mg/m3 TWA
Isopropyl Alcohol CAS # 67-63-0	200 ppm TWA; 400 ppm STEL; Potential for cutaneous absorption
Hydrogen Peroxide CAS # 7722-84-1	1 ppm TWA; 1.5 mg/m3 TWA; 2 ppm STEL; 3 mg/m3 STEL

NIOSH

Ethyl Alcohol CAS # 64-17-5	3300 ppm IDLH (10% LEL); 1000 ppm TWA; 1900 mg/m3 TWA
Isopropyl Alcohol CAS # 67-63-0	2000 ppm IDLH (10% LEL); 400 ppm TWA; 980 mg/m3 TWA; 500 ppm STEL; 1225 mg/m3 STEL
Hydrogen Peroxide CAS # 7722-84-1	75 ppm IDLH; 1 ppm TWA; 1.4 mg/m3 TWA

Japan	None established
Engineering Controls	No special engineering controls are required. Use with good general ventilation.
Respiratory Protection	Under normal conditions, the use of this product should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.
Eye Protection	Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.
Skin Protection	Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

Section 9 Physical and Chemical Properties

Physical State	Liquid	**Vapor Density**	Not available

Section 9 Physical and Chemical Properties (Continued)

Color	Colorless	**Specific Gravity (Water=1.0)**	0.9 @20°C
Transparency	Clear	**Solubility**	
Odor	Alcohol odor	**Water**	Soluble
pH	Not available	**Organic**	Not available
Freezing Point	Not available	**Viscosity**	Not available
Boiling Point	Not available	**Coefficient of Water/Oil Distribution**	Not available
Flash Point	15.5°C (59.9°F)	**Autoignition Temp.**	Not available
Evaporation Rate	Not available	**Decomposition Temperature**	Not available
Flammability (Solid, Gas)	Not applicable	**Percent Volatiles**	Not available
Flammable Limits	Not available	**Vapor Pressure**	Not available
Oxidizing Properties	Not applicable	**Odor Threshold**	Ethyl Alcohol 180 ppm geometric mean air odor threshold = (detectable); 100 ppm geometric mean air odor threshold = (recognizable) Isopropyl Alcohol 43 ppm geometric mean air odor threshold = (detectable); 19 ppm geometric mean air odor threshold = (recognizable)

Section 10 Stability and Reactivity

Stability	Stable under normal temperatures and pressures.
Hazardous Incompatibilities	Strong acids Strong bases Strong oxidizers
Hazardous Decomposition Products	No decomposition products posing significant hazards would be expected from this product.
Conditions to Avoid	Avoid contact with incompatible materials.

Section 11 Toxicological Information

Toxicity Data for Hazardous Ingredients

Ethyl Alcohol CAS # 64-17-5	Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h
Isopropyl Alcohol CAS # 67-63-0	Inhalation LC50 Rat 72.6 mg/L 4 h; Oral LD50 Rat 4396 mg/kg; Dermal LD50 Rat 12800 mg/kg; Dermal LD50 Rabbit 12870 mg/kg
Ethyl Paraben CAS # 120-47-8	Oral LD50 Mouse 3 g/kg
Hydrogen Peroxide CAS # 7722-84-1	Inhalation LC50 Rat 2 mg/L 4 h; Oral LD50 Rat 801 mg/kg; Dermal LD50 Rat 4060 mg/kg; Dermal LD50 Rabbit 2000 mg/kg

Primary Routes of Exposure

Eye contact, ingestion, inhalation, and skin contact.

Potential Effects of Acute Exposure

May cause irritation or burning of skin and eyes by contact. Inhalation and ingestion of large volumes may cause burning of mucous membrane, respiratory irritation, and central nervous system depression.

Potential Effects of Chronic Exposure

Chronic exposure may result in effects similar to those described for acute exposure. Frequent or long-term contact may dry out the skin resulting in dermatitis.

Repeated exposure may result in allergic reactions.

Symptoms of Overexposure

Symptoms of overexposure may include: throat irritation and coughing; dry, red, cracked skin; red irritated eyes; headache, drowsiness, dizziness, stupor; convulsions and coma.

Conditions Aggravated by Exposure

Individuals with eye and skin disorders may find these conditions aggravated by exposure to this product.

Individuals with eye, kidney, liver and cardiovascular, nervous and respiratory system disorders may find these conditions aggravated by exposure to this product.

Irritation/Sensitization

May cause sensitization by inhalation and skin contact.

Carcinogenicity

No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 67/548/EEC Annex I.

Mutagenicity

None identified.

Reproductive Toxicity

Reproductive effects have been reported in animal studies.

Other Effects

None identified.

Section 12 Ecological Information

Ecotoxicity

Fresh Water Species

Ethyl Alcohol CAS # 64-17-5	96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400 - 15100 mg/L [flow-through]
Isopropyl Alcohol CAS # 67-63-0	96 Hr LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 11130 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: >1400000 µg/L
Hydrogen Peroxide CAS # 7722-84-1	96 Hr LC50 Pimephales promelas: 16.4 mg/L; 96 Hr LC50 Lepomis macrochirus: 18-56 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 10.0-32.0 mg/L [static]

Microtox

No information available.

Section 12 Ecological Information (Continued)

Water Flea

Ethyl Alcohol CAS # 64-17-5	48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 24 Hr EC50 Daphnia magna: 10800 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L [Static]
Isopropyl Alcohol CAS # 67-63-0	48 Hr EC50 Daphnia magna: 13299 mg/L
Hydrogen Peroxide CAS # 7722-84-1	24 Hr EC50 Daphnia magna: 7.7 mg/L; 48 Hr EC50 Daphnia magna: 18 - 32 mg/L [Static]

Fresh Water Algae

Isopropyl Alcohol CAS # 67-63-0	96 Hr EC50 Desmodesmus subspicatus: >1000 mg/L; 72 Hr EC50 Desmodesmus subspicatus: >1000 mg/L
Hydrogen Peroxide CAS # 7722-84-1	72 Hr EC50 Chlorella vulgaris: 2.5 mg/L

Biodegradability No information available.

Bioaccumulation No information available.

Mobility No information available.

Other Adverse Effects No information available.

Section 13 Disposal Considerations

Waste Disposal Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.

Section 14 Transport Information

Shipping Information	Shipping Name	Alcohols, n.o.s. (Ethanol, Isopropanol solution)
	UN/ID Number	1987
	Packing Group	II
IATA	Hazard Class	3 Flammable Liquids
	Subsidiary Risk	None
	Special Provisions	A3
	IATA ERG Code	3L
IMDG	Hazard Class	3 Flammable liquids
	Subsidiary Risk	None
	Special Provisions	274
	Marine Pollutant	No
US DOT	Hazard Class	3 ORM-D Consumer Commodity
	Subsidiary Risk	None
	Special Provisions	173.150
	NAERG Number	127
European ADR	ADR Classification	3 Flammable Liquids
	Classification Code	F1

Section 14 Transport Information (Continued)

	Subsidiary Risk	None
Canadian TDG	PIN	1987
	TDG Classification	3 Flammable Liquids
	Subsidiary Risk	None
	Special Provisions	16
	NAERG Number	127

Section 15 Regulatory Information

US Federal and State Regulations

SARA 313
Isopropyl Alcohol is subject to reporting requirements of Section 313, Title III of SARA.

CERCLA RG's, 40 CFR 302.4
No ingredients listed.

California Proposition 65
Ethyl Alcohol has been identified by the State of California to cause reproductive harm. The State of California has adopted a regulation which requires a warning be given to individual who may be exposed to chemicals identified by the State to cause cancer or reproductive harm. Accordingly, Beckman Coulter advises you of the following warning:
WARNING: This product contains a chemical known to the State of California to cause reproductive harm.

Massachusetts MSL
Ethyl Alcohol is listed.
Isopropyl Alcohol is listed.
Hydrogen Peroxide is listed.

New Jersey Dept. of Health RTK List
Ethyl Alcohol is listed.
Isopropyl Alcohol is listed.
Hydrogen Peroxide is listed.

Pennsylvania RTK
Ethyl Alcohol is listed.
Isopropyl Alcohol is listed.
Hydrogen Peroxide is listed.

EU Regulations

Water Hazard Class (Germany)
WGK 1, low water endangering

Canada

This product is exempt from WHMIS label and SDS requirements.

PIN:
1987

Ingredients on Ingredient Disclosure List:
Ethyl Alcohol
Isopropyl Alcohol
Hydrogen Peroxide

Ingredients with unknown toxicological properties:
Product is exempt

Some hazardous ingredients listed in Section 15 are below OSHAs and WHMIS' 1.0% w/w (0.1% for carcinogens) or EU's ingredient specific concentrations required for reporting in Section 3.

Section 16 Other Information

Beckman Coulter Safety Rating	**Flammability (Section V): 3** **Health (Section XI): 2** **Reactivity with Water (Section X): 2** **Contact (Section VIII): 2**	Code 0=none 1=slight 2=caution 3=severe
Revision Changes	Update of product hazard classification for EU.	
Hazard Class and Phrases Description From Section 3	C - Corrosive F - Highly flammable O - Oxidising Xi - Irritant R11 Highly flammable. R35 Causes severe burns. R20/22 Harmful by inhalation and if swallowed. R36 Irritating to eyes. R67 Vapours may cause drowsiness and dizziness. R5 Heating may cause an explosion. R8 Contact with combustible material may cause fire. B2 - Flammable and Combustible Material: Flammable Liquid C - Oxidizing Material D2A - Poisonous and Infections Material: Division 2 - Other Toxic Effects: Very Toxic (Reproductive cell mutagenicity) D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Skin sensitization) D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Skin or Eye Irritation) E - Corrosive Material Acute Tox. Inhal. 4 - Acute Toxicity Inhalation, Category 4 Acute Tox. Oral 4 - Acute Toxicity Oral, Category 4 Eye Dam. 1 - Eye Damage Category 1 Eye Irrit. 2A - Eye Irritation Category 2A Flam. Liq. 2 - Flammable Liquids, Category 2 Ox. Liq. 1 - Oxidizing Liquids Category 1 Skin Corr. 1A - Skin Corrosion Category 1A STOT SE 3 - Specific Target Organ Toxicity Single Exposure Category 3 H225 Highly flammable liquid and vapour. H271 May cause fire or explosion; strong oxidiser. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.	
Water Hazard Class (Germany): WGK 1, slightly water endangering (self classification)		
This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.		
For further information, please contact your local Beckman Coulter representative.		