BECKMAN COULTER

SAFETY DATA SHEET

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Section 1 Identification of the Substance/mixture and of the Company/undertaking

1.1 Product Identifier

Product Name Hemoccult Developer

Part Number 60151, 60152, 61100, 61130, 61200, 62115, 63202

Series Name 60000 Series

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

Product Use For In Vitro Diagnostic Use. See product literature for details.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Beckman Coulter, Inc.
250 S. Kraemer Blvd
Brea, CA 92821, U.S.A.
Tel: 800-854-3633

EC REP Address

Beckman Coulter Eurocenter S.A.
22, rue Juste-Oliver, Case Postale 1044,
CH-1260 Nyon 1, Switzerland.
Telephone +41 (0)22 365 36 11
Monday through Friday, 9:00 am to 7:00pm)

e-mail address SDSNT@beckman.com

1.4 Emergency telephone number

Telephone number (24H) Chemtrec Emergency Tel No. U.S.A. 800-424-9300, International (001) 703-527-3887

Distributor and Emergency Phone No.

Refer to attached list, Document ID: A86357, for local distributor and emergency phone numbers.

Section 2 Hazards Identification

2.1 Classification of substance or mixture

Product Description Mixture

Colorless; Clear; Liquid; Alcohol odor

Classification according to EC 1272/2008 (CLP/GHS)

Flammable Liquids, Category 2
Skin Irritation Category 2
Eye Damage Category 1

Classification according to EC Directives 1999/45/EC and 67/548/EEC

F;R11

Section 2 Hazards Identification (Continued)

Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS

Flammable Liquids, Category 2
Acute Toxicity Oral, Category 5
Skin Irritation Category 2
Eye Damage Category 1

2.2 Label Elements

According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS

Hazardous Ingredients

Ethyl Alcohol
Isopropyl Alcohol
Hydrogen Peroxide

Pictogram

Signal Word

DANGER

Hazard Statements

H225 Highly flammable liquid and vapour.
H303 May be harmful if swallowed
H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary Statements

P210 Keep away from heat, hot surfaces, and sparks. No smoking.
P233 Keep container tightly closed.
P240 Ground container and receiving equipment.
P241 Use explosion-proof electrical equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharge.
P280 Wear protective gloves, protective clothing and eye/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353 IF ON SKIN (or hair): Rinse skin with water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before use.
P370+P378 In case of fire: Use water spray for extinction.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/national regulations

Product label will display most significant precautionary statements.82.2% of product contains ingredients of unknown oral toxicity.

Section 2 Hazards Identification (Continued)

2.3 Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

See Section 11 Toxicological Information for more detailed health information.

Section 3 Composition and Information on Ingredients

3.2 Mixtures

Hazardous Ingredients:		Hazard Classification of Pure Ingredients			
Chemical Name	**% by wt.**	**EU-67/548/EEC**	**EU 1272/2008 CLP/GHS**	**GHS**	
Ethyl Alcohol CAS # 64-17-5 EINECS # 200-578-6 Index # 603-002-00-5	75-85	F;R11	Flam. Liq. 2 H225	Flam. Liq. 2 H225	
Hydrogen Peroxide CAS # 7722-84-1 EINECS # 231-765-0 Index # 008-003-00-9	3-6	O;R5-8 C;R35-20/22	Acute Tox. Inhal. 4 Acute Tox. Oral 4 Eye Dam. 1 Ox. Liq. 1 STOT SE 3 Skin Corr. 1A H271; H302; H314; H318; H332; H335	Acute Tox. Inhal. 4 Acute Tox. Oral 4 Eye Dam. 1 Ox. Liq. 1 STOT SE 3 Skin Corr. 1A H271; H302; H314; H318; H332; H335	
Isopropyl Alcohol CAS # 67-63-0 EINECS # 200-661-7 Index # 603-117-00-0	3-6	F;R11 Xi;R36-67	Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 H225; H319; H336	Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 H225; H319; H336	

See section 8 for available Occupational exposure limits
See Section 15 for additional regulatory information
See Section 16 for hazard class, hazard statements and risk phrase description

Section 4 First Aid Measures

4.1 Description of 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 4 First Aid Measures (Continued)

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye damage.
Causes skin irritation.
May be harmful if swallowed
See Section 11 Toxicological Information for more detailed health information.

4.3 Indication of any immediate medical attention and special treatment needed

No specific medical attention or treatment required.

Section 5 Fire Fighting Measures

Flammable Properties Flammable liquid and vapor.

5.1 Extinguishing Media Dry chemical, carbon dioxide or alcohol resistant foam. Use water spray to cool containers exposed to fire.

5.2 Special hazards arising from the substance or mixture

Special Fire and Explosion Hazards

Vapors form explosive mixtures with air above flash point. Vapors are heavier than air; fire may flash from ignition source back along vapor trail.

Hazardous Combustion Products

Oxides of carbon

5.3 Advice for fire fighters

Protective Equipment Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

5.4 Additional information No further relevant information available.

Section 6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions Observe general safety guidelines for protection; avoid eye and skin contact.
Wear protective gloves, protective clothing and eye/face protection.

6.2 Environmental Precautions Contain spill to prevent migration or evaporation.
Do not allow the undiluted product to enter sewers/surface or ground water.
Dispose of contents/container in accordance with local regulations

6.3 Methods and material for containment and cleaning up

Spill and Leak Procedures Ventilate area. Remove all sources of ignition. Contain spill and collect with inert absorbent and place in a suitable container for disposal.
Dispose of all waste material in accordance with local guidelines.

6.4 Reference to other sections Refer sections 8 and 13.

Section 7 Handling and Storage

7.1 Precautions for safe handling

Use good laboratory procedures; avoid eye and skin contact.

Avoid inhalation of vapor or mist.

7.2 Conditions for safe storage, including any incompatibilities

Store at 15 to 30°C, as directed on the product label.

To maintain product quality, store according to the instructions in the product labeling.

Store away from strong acids, strong bases, strong oxidizers and incompatible materials (section 10).

7.3 Specific end uses

No further relevant information available.

Section 8 Exposure Controls and Personal Protection

8.1 Control parameters

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

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

Ireland

Ethyl Alcohol CAS # 64-17-5	1000 ppm STEL
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

IOELVs None established

Section 8 Exposure Controls and Personal Protection (Continued)

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); 500 ppm STEL; 1225 mg/m3 STEL; 400 ppm TWA; 980 mg/m3 TWA
Hydrogen Peroxide CAS # 7722-84-1	75 ppm IDLH; 1 ppm TWA; 1.4 mg/m3 TWA

Japan None established

8.2 Exposure controls

Engineering Controls No special engineering controls are required. Use with good general ventilation.

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.

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.

Section 9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid	**Specific Gravity (Water=1.0)**	0.9 @20°C
Color	Colorless	**Solubility**	
Transparency	Clear	**Water**	Soluble
Odor	Alcohol odor	**Organic**	Not determined
pH	Not determined	**Partition coefficient: n-octanol/water**	Not determined
Freezing Point	Not determined	**Auto-ignition Temp.**	Not determined
Boiling Point	Not determined	**Decomposition Temperature**	Not determined
Flash Point	15.5°C (59.9°F)	**Percent Volatiles**	Not determined
Evaporation Rate	Not determined	**Vapor Pressure**	Not determined
Flammability (Solid, Gas)	Not applicable	**Viscosity**	Not determined
Flammability Limits	Not determined	**Explosive Properties**	Not applicable

Section 9 Physical and Chemical Properties (Continued)

Vapor Density	Not determined	**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)		

9.2 Other Information No further relevant information available.

Section 10 Stability and Reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical Stability The product is stable in accordance with recommended storage conditions.

10.3 Possibility of hazardous reactions

Avoid exposure to heat and incompatible materials.

10.4 Conditions to Avoid To maintain product performance keep away from strong acids, strong bases, strong oxidizers.

Avoid exposure to heat and direct sunlight.

10.5 Incompatible materials Oxidizing agents

10.6 Hazardous Decomposition Products

When stored as labeled, no known hazardous decomposition products are formed during the shelf-life of this product.

Section 11 Toxicological Information

11.1 Information on toxicological effects

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
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.
Skin Corrosion/Irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory/skin sensitization	No data available.
Carcinogenicity	No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.
Germ cell mutagenicity	No data available.

Section 11 Toxicological Information (Continued)

Reproductive Toxicity No data available.

Specific target organ toxicity – single exposure

No data available.

Specific target organ toxicity – repeated exposure

No data available.

Aspiration hazard No data available.

Other Information May be harmful if swallowed

Section 12 Ecological Information

12.1 Ecotoxicity

Fresh Water Species

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

Microtox No information available.

Water Flea

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

Fresh Water Algae

Isopropyl Alcohol CAS # 67-63-0	96 h EC50 Desmodesmus subspicatus: >1000 mg/L; 72 h EC50 Desmodesmus subspicatus: >1000 mg/L

12.2 Persistence and degradability Not determined for the product.

12.3 Bioaccumulation Not determined for the product.

12.4 Mobility in soil Not determined for the product.

Section 12 Ecological Information (Continued)

12.5 Results of PBT and vPvB assessment

Not determined for the product. PBT: Not applicable, vPvB: Not applicable.

12.6 Other Adverse Effects

No further relevant information available.

Section 13 Disposal Considerations

13.1 Waste treatment methods

Product Waste Disposal

Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.

Package 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.

13.2 Additional information

Suggested European waste catalogue 18 01 06* - chemicals consisting of or containing dangerous substances. Dispose in accordance with national, state and local waste regulations.

Section 14 Transport Information

	Shipping Information	IATA	IMDG	US DOT	European ADR	Canadian TDG
14.1	UN/ID Number	1987	1987	1987	1987	PIN - 1987
14.2	Shipping Name	Alcohols, n.o.s. (Ethanol, Isopropanol solution)				
14.3	Hazard Class	3 Flammable Liquids	3 Flammable liquids	3 Flammable liquid	3 Flammable Liquids	3 Flammable Liquids
	Subsidiary Risk	None	None	None	None	None
	Classification Code	Not applicable	Not applicable	Not applicable	F1	Not applicable
14.4	Packing Group	II	II	II	II	II
	Special Provisions	A3	274	172	274	16
	Additional information					
	IATA ERG Code	3L	Not applicable	Not applicable	Not applicable	Not applicable
	EmS	Not applicable	F-E, S-D	Not applicable	Not applicable	Not applicable
	NAERG Code	Not applicable	Not applicable	127	Not applicable	127
14.5	Environmental Hazards					
	Marine Pollutant	Not applicable	No	Not applicable	Not applicable	Not applicable

Section 14 Transport Information (Continued)

Shipping Information	IATA	IMDG	US DOT	European ADR	Canadian TDG

14.6 Special Precautions for user

Warning: Flammable liquid.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Section 15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

US Federal and State Regulations

SARA 313 Isopropyl Alcohol is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration

California Proposition 65 No ingredients listed.

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

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

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

REACH 1907/2006 EC - Annex XIV - list of substances subject to authorization.

No ingredients listed.

According to EC Directives (1999/45/EC and 67/548 EEC)

Highly flammable

F

Risk and Safety Phrases

R11 Highly flammable.
S16 Keep away from sources of ignition - No smoking.
S7 Keep container tightly closed.

Canada

This product is exempt from WHMIS label and SDS requirements.

PIN 1987

Section 15 Regulatory Information (Continued)

Ingredients on Ingredient Disclosure List

Ethyl Alcohol
Isopropyl Alcohol
Hydrogen Peroxide

Ingredients with unknown toxicological properties

Product is exempt

15.2 Chemical Safety Assessment A Chemical Safety Assessment has not been carried out.

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: 3** **Health: 2** **Reactivity with Water: 1** **Contact: 2**	Code 0=None 1=Slight 2=Caution 3=Severe

Revision Changes Updated to GHS.

Hazard Class, hazard statements and risk phrase 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.
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. 2 - Eye Irritation Category 2
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
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.

Section 16 Other Information (Continued)

H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.

Abbreviations and Acronyms

ACGIH - American Conference of Governmental Industrial Hygienists
ADR - European Agreement Concerning The International Carriage Of Dangerous Goods By Road
CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act
CLP - Classification, Labeling and Packaging
DFGMAK - Republic Germany's maximum exposure limit
GHS - Globally Harmonized System
HCS - Hazard Communication Standard
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
ICAO - International Civil Aviation Organization
IMDG - International Maritime Dangerous Goods
IOELVs - European Unions' Indicative Occupational Exposure Limit Values
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PBT - Persistent bioaccumulative and toxic substances
SARA - Superfund Amendments and Reauthorization Act
TDG - Canadian Transportation Of Dangerous Goods Regulations.
UN GHS - United Nations Globally Harmonized System
US DOT - United States Department of Transportation
WHMIS - Workplace Hazardous Material Information System
vPvB - Very persistent and very bioaccumulative substances
LC50 - Lethal Concentration, 50%
LD50 - Lethal Dose, 50%

For further information, please contact your local Beckman Coulter, Inc. representative.