



SAFETY DATA SHEET

Doc. ID: 62115-75 AN
Revised (year/month/day) 2014/03/04

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

1.1 Product Identifier

Product Name Hemocult® 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 supplier of the safety data sheet

	Manufacturer	EC REP Address
e-mail address	Beckman Coulter, Inc. 250 S. Kraemer Blvd Brea, CA 92821, U.S.A. Tel: 800-854-3633 SDSNT@beckman.com	Beckman Coulter Ireland Inc. Mervue Business Park Mervue, Galway, Ireland Tel: 353 91 774068

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: 472050, 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 Directives 1999/45/EC and 67/548/EEC

US OSHA F;R11
WHMIS Hazardous
Exempt

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.

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Section 2 Hazards Identification (Continued)

2.2 Label Elements

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.

2.3 Other Hazard

None identified

See Section 11 Toxicological Information for more detailed health information.

Section 3 Composition and Information on Ingredients

3.2 Mixture

Hazardous Ingredients:		Hazard Classification of Pure Ingredients				
Chemical Name	% by wt.	EU-67/548/EEC	EU 1272/2008 CLP/GHS	US OSHA	WHMIS	
Ethyl Alcohol CAS # 64-17-5 EINECS # 200-578-6 Index # 603-002-00-5	<90	F;R11	Flam. Liq. 2 H225	Flammable Irritant	B2; D2B	
Isopropyl Alcohol CAS # 67-63-0 EINECS # 200-661-7 Index # 603-117-00-0	<5	F;R11 Xi;R36-67	Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 H225; H319; H336	Flammable Irritant	B2; D2B	
Hydrogen Peroxide CAS # 7722-84-1 EINECS # 231-765-0 Index # 008-003-00-9	<2	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	Oxidizer Corrosive	C; E	

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.

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Section 4 First Aid Measures (Continued)

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| Ingestion | If ingested, wash mouth out with water. If irritation or discomfort occurs, seek medical attention. |
| 4.2 Most important symptoms and effects, both acute and delayed | 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 | Use extinguishing media suitable for surrounding fire. |
| 5.2 Special hazards arising from the substance or mixture | |
| 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. |
| 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

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|---|--|
| 6.1 Personal precaution, protective equipment and emergency procedures | |
| Personal Precautions | Use good laboratory procedures; avoid eye and skin contact. |
| 6.2 Environmental Precautions | Contain spill to prevent migration. |
| 6.3 Methods and material for containment and cleaning up | |
| Spill and Leak Procedures | Absorb spilled material with an appropriate inert, non-flammable absorbent and dispose according to local regulations. |
| 6.4 Reference to other sections | Refer sections 8 and 13. |

Section 7 Handling and Storage

- | | |
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| 7.1 Precautions for safe handling | Use good laboratory procedures; avoid eye and skin contact.
Use in well ventilated area away from heat or ignition sources. |
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Section 7 Handling and Storage (Continued)

7.2 Conditions for safe storage, including any incompatibilities

To maintain efficacy, store according to the instructions in the product labeling.
Keep away from incompatible material (see Section 10).

7.3 Specific end uses

No data 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

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

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Section 8 Exposure Controls and Personal Protection (Continued)

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	Coefficient of Water/Oil Distribution	Not determined
Freezing Point	Not determined	Autoignition 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
Flammable Limits	Not determined	Explosive Properties	Not applicable
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 additional information available

Section 10 Stability and Reactivity

10.1 Reactivity No data available.

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Section 10 Stability and Reactivity (Continued)

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| 10.2 Chemical Stability | Stable under normal temperatures and pressures. |
| 10.3 Possibility of hazardous reactions | No data available. |
| 10.4 Conditions to Avoid | Avoid contact with incompatible materials. |
| 10.5 Incompatible materials | Strong acids
Strong bases
Strong oxidizers |
| 10.6 Hazardous Decomposition Products | No decomposition products posing significant hazards would be expected from 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 4 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 eye irritation

Skin/Respiratory 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 None identified

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.

Section 11 Toxicological Information (Continued)

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.

Other Information None identified

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

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

Hydrogen Peroxide
CAS # 7722-84-1

72 h EC50 Chlorella vulgaris: 2.5 mg/L

12.2 Persistence and degradability No information available.

12.3 Bioaccumulation No information available.

12.4 Mobility in soil No information available.

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Section 12 Ecological Information (Continued)

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Other Adverse Effects

No 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

European waste catalogue 18 01 06* - chemicals consisting of or containing dangerous substances.

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 Hazard					
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
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14.6 Special Precautions for users

No special precautions for users are required.

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

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 cancer and 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 cancer and 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

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.

Canada

This product is exempt from WHMIS label and SDS requirements.

PIN 1987

Ingredients on Ingredient Disclosure List

Ethyl Alcohol
Isopropyl Alcohol
Hydrogen Peroxide

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Section 15 Regulatory Information (Continued)

Ingredients with unknown toxicological properties

Product is exempt

15.2 Chemical Safety Assessment

No chemical safety assessment required.

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: 2 Contact: 2	Code 0=None 1=Slight 2=Caution 3=Severe
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Revision Changes

Add new product part number to SDS.

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.
 B2 - Flammable and Combustible Material: Flammable Liquid
 C - Oxidizing Material
 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. 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.
 H319 - Causes serious eye irritation.

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Section 16 Other Information (Continued)

Abbreviations and Acronyms

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation.

H336 - May cause drowsiness or dizziness.

ACGIH - American Conference of Governmental Industrial Hygienists

DFGMAK - Republic Germany's maximum exposure limit

NIOSH - National Institute for Occupational Safety and Health

IARC - Internal Agency for Research on Cancer

NTP - National Toxicology Program

LC50 - Lethal Concentration, 50%

LD50 - Lethal Dose, 50%

EC50 - Effective Concentration, 50%

Water Hazard Class: WGK 1, slightly water endangering (self classification)

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

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