




MATERIAL SAFETY DATA SHEET

Section 1 Company and Product Identification

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| Product Name | Hemocult®SENSA® Developer | Doc. ID 64115-75 AF Issued (year/month/day) Revised (year/month/day) 2005/12/26 |
| Part Number | 395009, 395034, 395035, 395134, 395136, 64000, 64115, 64130, 64151, 64152, 64200 | |
| Product Use | For In Vitro Diagnostic Use. See product literature for details. | |
| Series Name | 64000 Series | |
| Manufacturer | Beckman Coulter, Inc. 4300 Harbor Blvd. Fullerton, CA 92835-3100, U.S.A. | |
| Distributor and Emergency Phone No. |  Refer to attached list, Document ID: 472050, for local distributor and emergency phone numbers. | |

Section 2 Composition and Information on Ingredients

| Hazardous Ingredients: | | | Meets Hazardous Criteria: | | |
|------------------------|-----------|----------|---------------------------------------|---------|--------|
| Chemical Name | CAS # | % by wt. | EU | US OSHA | WHMIS |
| Hydrogen Peroxide | 7722-84-1 | <5 | No | Yes | Exempt |
| Ethyl Paraben | – | <5 | Xi;R43 | Yes | Exempt |
| Ethanol-methanol mix | 8013-52-3 | >50 | F;R11 Xn;R20/21/22- 68/20/21/22 | Yes | Exempt |

See Section 15 Regulatory Information for additional information on hazard classifications.

Section 3 Hazards Identification

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|---|--|-------------------------|------------------------------|
| Emergency Overview | <p style="text-align: center;">Colorless; Clear; Liquid; Alcohol odor Flammable liquid and vapor. CNS depressant. Eye, skin and respiratory tract irritant. Potential sensitizer.</p> | | |
| 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. See Section 11 Toxicological Information for more detailed health information. | | |
| Product Hazard Classifications | EU: Xn;R11-20/21/22- 68/20/21/22-43 | WHMIS: Exempt | US OSHA: Hazardous |

Section 3 Hazards Identification (Continued)

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| Beckman Coulter Safety Rating | Flammability (Section V): 2 Health (Section XI): 2 Reactivity with Water (Section X): 2 Contact (Section VIII): 2 | Code 0=none 1=slight 2=caution 3=severe |
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Section 4 First Aid Measures

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| Inhalation | If product is inhaled, move exposed individual to fresh air. If breathing has stopped, begin artificial respiration. If breathing is difficult or has stopped, obtain medical attention. |
| Eye Contact | If product is splashed in eyes, wash eyes under gently running water for 15 minutes or longer, making sure that the eyelids are held open. 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

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| Flash Point | 13°C(55.4°F) |
| Flammable Limits | Lower flammable limit: 3.3%; Upper flammable limit: 19% |
| Autoignition Temp. | Not available |
| Extinguishing Media | Dry chemical, carbon dioxide, regular foam or water spray. |
| 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. |

Section 6 Accidental Release Measures

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| 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

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| Handling Precautions | Use in well ventilated area away from heat or ignition sources. Use good laboratory procedures; avoid eye and skin contact. |
| Recommended Storage Conditions | To maintain efficacy, store according to the instructions in the product labeling. |

Section 8 Exposure Controls and Personal Protection

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| Exposure Limits | |
| US OSHA: | |
| Hydrogen Peroxide | 1 ppm TWA; 1.4 mg/m ³ TWA |
| ACGIH: | |
| Hydrogen Peroxide | 1 ppm TWA |
| DFG MAK: | |
| Hydrogen Peroxide | 1 ppm MAK; 1.4 mg/m ³ MAK; 1 ppm Peak; 1.4 mg/m ³ Peak |
| Engineering Controls | Use in well ventilated area. |
| 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. |
| Skin Protection | Impervious gloves, such as latex or equivalent, should be worn to prevent skin contact. |

Section 9 Physical and Chemical Properties

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| Physical State | Liquid |
| Color | Colorless |
| Transparency | Clear |
| Odor | Alcohol odor |
| Odor Threshold | Not applicable |
| pH | Not available |
| Boiling Point | 78°C(172.4°F) |
| Melting Point | Not available |
| Specific Gravity | 0.8 @20°C |
| Vapor Pressure | 40 mm Hg @25°C |
| Vapor Density | 1.6 (air=1) |
| Evaporation Rate | Not available |
| Solubility | |
| Water | Soluble |
| Organic | Not available |

Section 10 Stability and Reactivity

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| Stability | Stable under normal temperatures and pressures. |
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Section 10 Stability and Reactivity (Continued)

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| Hazardous Incompatibilities | Halogens Strong bases Strong oxidizers Strong acids |
| Hazardous Decomposition Products | When stored as labeled, no known hazardous decomposition products are formed during the shelf-life of this product. |
| Conditions to Avoid | Avoid contact with heat, ignition sources and incompatible materials. |

Section 11 Toxicological Information

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| Toxicity Data for Hazardous Ingredients Hydrogen Peroxide | Inhalation LC50 Rat: 2 mg/L/4H; Oral LD50 Rat: 801 mg/kg; Dermal LD50 Rat: 4060 mg/kg; Dermal LD50 Rabbit: 2000 mg/kg |
| Primary Routes of Exposure | The most likely routes of exposure are skin and eye contact. Inhalation may occur if mists are formed in product use. |
| 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. |
| Carcinogenicity | No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 67/548/EEC Annex I. |
| Other Effects | None identified. |
| Conditions Aggravated by Exposure | Individuals with eye and skin disorders may find these conditions aggravated by exposure to this product. |

Section 12 Ecological Information

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| Ecotoxicity | Hydrogen Peroxide: 48 Hr LC50 carp: 42 mg/L |
| Biodegradability | No information available. |
| Mobility | No information available. |

Section 13 Disposal Considerations

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| 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. |
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Section 14 Transport Information

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| 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 | A112 Not applicable |
| | IATA ERG Code | 3L |
| IMDG | Hazard Class | 3 Flammable liquids |
| | Subsidiary Risk | None |
| | Special Provisions | 274 |
| | Marine Pollutant | No |
| US DOT | Hazard Class | ORM-D Consumer Commodity |
| | Subsidiary Risk | None |
| | Special Provisions | 173.150 |
| | NAERG Number | 127 |
| European ADR | ADR Classification | 3Flammable 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

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|--|------------------------------|
| 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. |

Section 15 Regulatory Information (Continued)

EU Labeling Classification

| Classification | Risk and Safety Phrases |
|---|---|
| <p>F</p>  <p>Highly flammable</p> <p>Xn</p>  <p>Harmful</p> | <p>R11 Highly flammable.</p> <p>R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.</p> <p>R43 May cause sensitization by skin contact.</p> <p>R68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.</p> <p>S16 Keep away from sources of ignition—No smoking.</p> |

Canada

This product is exempt from WHMIS label and MSDS requirements.

PIN: 1987

Ingredients on Ingredient Disclosure List: Hydrogen Peroxide

Ingredients with unknown toxicological properties: Product is exempt

Section 16 Other Information

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

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