



SAFETY DATA SHEET

Doc. ID: 66115-75 AF

Revised (year/month/day) 2013/04/25

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

1.1 Product Identifier

Product Name Gastrocult®Developer
Part Number 66115
Series Name 66000 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

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

EC REP Address

Beckman Coulter Ireland Inc.
 Mervue Business Park
 Mervue, Galway, Ireland
 Tel: 353 91 774068

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: [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

Xn;R10-20/21/22-68/20/21/22

US OSHA Hazardous

WHMIS 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.
 Harmful by inhalation, in contact with skin and if swallowed.

Section 2 Hazards Identification (Continued)

2.2 Label Elements

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

Harmful
Xn



Risk and Safety Phrases

- R10 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.
- S16 Keep away from sources of ignition - No smoking.
- S36/37 Wear suitable protective clothing and gloves.
- 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	
Ethanol-methanol mix CAS # 8013-52-3 EINECS # Not available Index # Not available	< 50	F;R11 Xn;R20/21/22-68/20/21/22	Acute Tox. Dermal 4 Acute Tox. Inhal. 4 Acute Tox. Oral 4 Flam. Liq. 2 STOT SE 2 H225; H302; H312; H332; H371	Flammable Irritant Toxic	B2; D2B	
Citric Acid CAS # 77-92-9 EINECS # 201-069-1 Index # Not available	<5	Xi;R36	Acute Tox. Dermal 5 Eye Irrit. 2 Skin Irrit. 3 H313; H316; H319	Corrosive	E	
Hydrogen Peroxide CAS # 7722-84-1 EINECS # 231-765-0 Index # 008-003-00-9	<5	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	
octylphenoxy-poly(ethoxyethanol) CAS # 9036-19-5 EINECS # Not available Index # Not available	<5	Xi;R37/38-41	Acute Tox. Oral 5 Eye Dam. 1 H303; H318	Irritant	D2B	

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.

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 None

Section 6 Accidental Release Measures

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.

Section 6 Accidental Release Measures (Continued)

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

7.1 Precautions for safe handling Use good laboratory procedures; avoid eye and skin contact.

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

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

ACGIH

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

DFG MAK

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

Ireland

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

NIOSH

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

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.

Section 8 Exposure Controls and Personal Protection (Continued)

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)	0.90 @20°C
Color	Colorless	Solubility	
Transparency	Clear	Water	Miscible
Odor	Alcohol odor	Organic	Not determined
pH	5-5.5	Coefficient of Water/Oil Distribution	Not determined
Freezing Point	Not determined	Autoignition Temp.	Not determined
Boiling Point	< 100°C (212°F)	Decomposition Temperature	Not determined
Flash Point	21°C (69.8°F)	Percent Volatiles	Not determined
Evaporation Rate	Not determined	Vapor Pressure	18 mm Hg @19°C
Flammability (Solid, Gas)	Not applicable	Viscosity	Not determined
Flammable Limits	Not determined	Explosive Properties	Not applicable
Vapor Density	1.6 (air=1)	Oxidizing Properties	Not determined
Odor Threshold	Not applicable		

9.2 Other Information None

Section 10 Stability and Reactivity

10.1 Reactivity	No data available.
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 bases

Section 11 Toxicological Information

11.1 Information on toxicological effects

Toxicity Data for Hazardous Ingredients

Citric Acid
CAS # 77-92-9 Oral LD50 Rat 3000 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

octylphenoxypoly(ethoxyethanol)
CAS # 9036-19-5 Oral LD50 Rat 4190 mg/kg

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

Skin/Respiratory sensitization Exposure may result in irritation of skin, eyes, and mucous membranes.

Carcinogenicity This product does not contain a reportable concentration ($\geq 0.1\%$) of any ingredient listed as carcinogen by ACGIH, IARC, NTP, OSHA or 67/548/EEC Annex I.

Mutagenicity None identified

Reproductive Toxicity Reproductive effects have been reported in animal studies.

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.

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

Citric Acid
CAS # 77-92-9 96 h LC50 Lepomis macrochirus: 1516 mg/L [static]

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]

Section 12 Ecological Information (Continued)

Microtox	No information available.
Water Flea	
Citric Acid CAS # 77-92-9	72 h EC50 Daphnia magna: 120 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	
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.
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	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	None

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 methanol 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	None	None	None
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

Section 14 Transport Information (Continued)

Shipping Information	IATA	IMDG	US DOT	European ADR	Canadian TDG
14.5 Environmental Hazard					
Marine Pollutant	Not applicable	No	Not applicable	Not applicable	Not applicable
14.6 Special Precautions for users	None				

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	Ethylene Oxide is subject to reporting requirements of Section 313, Title III of SARA. 0.1 % de minimis concentration 1,4-Dioxane is subject to reporting requirements of Section 313, Title III of SARA. 0.1 % de minimis concentration
CERCLA RG's, 40 CFR 302.4	Ethylene Oxide is listed. 1,4-Dioxane is listed.
California Proposition 65	Ethylene Oxide 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. 1,4-Dioxane has been identified by the State of California to cause cancer. 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.
Massachusetts MSL	Ethylene Oxide is listed. 1,4-Dioxane is listed. Hydrogen Peroxide is listed.
New Jersey Dept. of Health RTK List	Ethylene Oxide is listed. 1,4-Dioxane is listed. Hydrogen Peroxide is listed.
Pennsylvania RTK	Ethylene Oxide is listed. 1,4-Dioxane is listed. Hydrogen Peroxide is listed.

Section 15 Regulatory Information (Continued)

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

Ethylene Oxide
Citric Acid
1,4-Dioxane
Hydrogen Peroxide
octylphenoxypoly(ethoxyethanol)

Ingredients with unknown toxicological properties

Product is exempt

15.2 Chemical Safety Assessment Not available

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
--------------------------------------	--	---

Revision Changes

Revised per 453/2010 EC and ANSI Z400.1-2004 Standard.

Hazard Class, hazard statements and risk phrase description from section 3

C - Corrosive
F - Highly flammable
O - Oxidising
Xi - Irritant
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.
R36 Irritating to eyes.
R37/38 Irritating to respiratory system and skin.
R41 Risk of serious damage to eyes.
R5 Heating may cause an explosion.
R8 Contact with combustible material may cause fire.

Section 16 Other Information (Continued)

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 or Eye Irritation)
E - Corrosive Material
Acute Tox. Dermal 4 - Acute Toxicity Dermal, Category 4
Acute Tox. Dermal 5 - Acute Toxicity Dermal, Category 5
Acute Tox. Inhal. 4 - Acute Toxicity Inhalation, Category 4
Acute Tox. Oral 4 - Acute Toxicity Oral, Category 4
Acute Tox. Oral 5 - Acute Toxicity Oral, Category 5
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
Skin Irrit. 3 - Skin Irritation Category 3
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.
H303 - May be harmful if swallowed
H312 - Harmful in contact with skin.
H313 - May be harmful In contact with skin
H314 - Causes severe skin burns and eye damage.
H316 - Causes mild skin irritation
H318 - Causes serious eye damage.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.
H371 - May cause damage to organs.

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

WHILE BECKMAN COULTER, INC. BELIEVES THE INFORMATION CONTAINED HEREIN IS VALID AND ACCURATE, BECKMAN COULTER MAKES NO WARRANTY OR REPRESENTATION AS TO ITS VALIDITY, ACCURACY, OR CURRENCY. BECKMAN COULTER SHALL NOT BE LIABLE OR OTHERWISE RESPONSIBLE IN ANY WAY FOR USE OF EITHER THIS INFORMATION OR MATERIALS TO WHICH IT APPLIES. DISPOSAL OF HAZARDOUS MATERIALS MAY BE SUBJECT TO LOCAL LAWS OR REGULATIONS.