

SAFETY DATA SHEET Doc. ID: 8306008-75 AC Revised (year/month/day) 2013/04/15

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

- 1.1 **Product Identifier Product Name** Fisherbrand® Optical Lens Cleaner Part Number 8306008 1.2 Relevant identified uses of the substance or mixture and uses advised against For laboratory use only **Product Use** Details of supplier of the safety data sheet 1.3 **EC REP Address** Manufacturer Beckman Coulter, Inc. Beckman Coulter Ireland Inc. 250 S. Kraemer Blvd Mervue Business Park Brea, CA 92821, U.S.A. Mervue, Galway, Ireland Tel: 800-854-3633 Tel: 353 91 774068 e-mail address SDSNT@beckman.com **Emergency telephone number** 1.4 **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; Fruity odor Classification according to EC Directives 1999/45/EC and 67/548/EEC Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC) Hazardous **US OSHA** WHMIS B3; D2B **Potential Health Effects** Contact with the skin or eyes may cause irritation. Summary 2.2 Label Elements According to EC Directives (1999/45/EC and 67/548 EEC)
 - Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC) None identified

2.3 Other Hazard

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
Ethylene Glycol Monobutyl Ether CAS # 111-76-2 EINECS # 203-905-0 Index # 603-014-00-0	4.9%	Xn;R20/21/22-36/38	Acute Tox. Dermal 4 Acute Tox. Inhal. 4 Acute Tox. Oral 4 Eye Irrit. 2 Flam. Liq. 4 Skin Irrit. 2 H227; H302; H312; H315; H319; H332	Combustible Liquid Irritant Toxic	B3; D1B; 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

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. Remove contaminated clothing and shoes. 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 ar	nd effects, both acute and delayed
		See Section 11 Toxicological Information for more detailed health information.
4.3	Indication of any immediate r	nedical attention and special treatment needed
		No specific medical attention or treatment required.

Section 4 First Aid Measures

Section 5 Fire Fighting Measures

	Flammable Properties	Nonflammable solution.
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	

None identified

Section 5 Fire Fighting Measures (Continued)

	Hazardous Combustion Products	
		No combustion products posing significant hazards are expected from this product.
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	No special precautions are necessary. Use good laboratory procedures.	
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

- 7.1 Precautions for safe handling No special precautions are necessary; use good laboratory procedures.
- 7.2 Conditions for safe storage, including any incompatibilities

Keep away from incompatible material (see Section 10).

Section 8 Exposure Controls and Personal Protection

8.1 Control parameters

Exposure Limits

US OSHA

Ethylene Glycol Monobutyl Ether 50 ppm TWA; 240 mg/m3 TWA; prevent or reduce skin absorption CAS # 111-76-2

ACGIH

Ethylene Glycol Monobutyl Ether 20 ppm TWA CAS # 111-76-2

DFG MAK

Ethylene Glycol Monobutyl Ether	20 ppm Peak; 98 mg/m3 Peak; skin notation; 10 ppm TWA MAK; 49 mg/m3 TWA
CAS # 111-76-2	MAK

Ireland

Ethylene Glycol Monobutyl Ether	20 ppm TWA; 98 mg/m3 TWA; 50 ppm STEL; 246 mg/m3 STEL; Potential for
CAS # 111-76-2	cutaneous absorption

Section 8 Exposure Controls and Personal Protection (Continued)

NIOSH

8.2

	Ethylene Glycol Monobutyl Ether CAS # 111-76-2	700 ppm IDLH; 5 ppm TWA; 24 mg/m3 TWA
	Japan	None established
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.

Section 9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties **Physical State** Liquid **Specific Gravity** 0.994 @20°C (Water=1.0) Color Colorless Solubility Transparency Clear Water Miscible Odor Fruity odor Organic Not determined pH Not determined Coefficient of Water/Oil Not determined Distribution **Freezing Point** Not determined Autoignition Temp. Not applicable 95°C (203°F) Decomposition Not determined **Boiling Point** Temperature Not applicable 4.9 % Flash Point **Percent Volatiles** Vapor Pressure **Evaporation Rate** Not determined Not determined Not applicable Not determined Flammability (Solid, Gas) Viscosity Not determined Flammable Limits **Explosive Properties** Not applicable Not determined Not determined Vapor Density **Oxidizing Properties** Ethylene Glycol Monobutyl Ether 0.10 ppm geometric mean air odor threshold = **Odor Threshold** (detectable); 0.35 ppm geometric mean air odor threshold = (recognizable)

9.2 Other Information



Section 10 Stability and Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable in closed containers under normal temperatures and pressures.
10.3	.3 Possibility of hazardous reactions	
		No data available.
10.4	Conditions to Avoid	Keep away from incompatible material.
10.5	Incompatible materials	Strong oxidizers
10.6	Hazardous Decomposition Pro	oducts
		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** Ethylene Glycol Monobutyl Ether Inhalation LC50 Rat 2.21 mg/L 4 h; Inhalation LC50 Rat 450 ppm 4 h; Oral LD50 CAS # 111-76-2 Rat 470 mg/kg; Dermal LD50 Rat 2270 mg/kg; Dermal LD50 Rabbit 220 mg/kg The most likely routes of exposure are skin and eye contact. Inhalation may **Primary Routes of Exposure** occur if mists are formed in product use. No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP. Carcinogenicity OSHA or 67/548/EEC Annex I. Potential Effects of Acute Exposure Contact with the skin or eyes may cause irritation. **Potential Effects of Chronic Exposure** None identified Symptoms of Overexposure Symptoms may include redness and itching or burning of the skin and eyes. **Conditions Aggravated by Exposure** None identified Other Information None identified

Section 12 Ecological Information

12.1 Ecotoxicity

Fresh Water Species	
Ethylene Glycol Monobutyl Ether CAS # 111-76-2	96 h LC50 Lepomis macrochirus: 1490 mg/L [static]; 96 h LC50 Lepomis macrochirus: 2950 mg/L
Microtox	No information available.
Water Flea	
Ethylene Glycol Monobutyl Ether CAS # 111-76-2	24 h EC50 Daphnia magna: 1698 - 1940 mg/L; 48 h EC50 Daphnia magna: >1000 mg/L

Section 12 Ecological Information (Continued)

	Fresh Water Algae	No information available.
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 asse	essment
		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

Transportation of this product is not regulated under ICAO, IMDG, US DOT, European ADR or Canadian TDG.

Section 15 Regulatory Information

SARA 313	Ethylene Glycol Monobutyl Ether 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	No ingredients listed.
Massachusetts MSL	Ethylene Glycol Monobutyl Ether is listed.
New Jersey Dept. of Health R	TK List
	Ethylene Glycol Monobutyl Ether is listed.
Pennsylvania RTK	Ethylene Glycol Monobutyl Ether is listed.
EU Regulations	
This SDS complies with EC Regula	tions 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.

Section 15 Regulatory Information (Continued)

Canada	
WHMIS Classification:	D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Eye Irritation)
	D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Skin Irritation)
	B3 - Flammable and Combustible Material: Combustible Liquid
PIN	Not applicable
Ingredients on Ingredient Disc	losure List
	Ethylene Glycol Monobutyl Ether
	Sodium Lauryl Sulfate
Ingredients with unknown toxi	cological properties
	None
15.2 Chemical Safety Assessment Some hazardous ingredients listed in Section 15 are	Not available below OSHAs and WHMIS' 1.0% w/w (0.1% for carcinogens) or EU's ingredient specific

Some hazardous ingredients listed in Section 15 concentrations required for reporting in Section 3.

Section 16 Other Information

Beckman Coulter Safety Rating	Flammability: 0 Health: 2 Reactivity with Water: 0 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				
	Xn - Harmful			
	R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.			
	R36/38 Irritating to eyes and skin.			
	B3 - Flammable and Combustible Material: Combustible Liquid			
	D1B - Poisonous and Infections Material: Division 1 - Immediate and Serious Toxic Effects: Toxic (Acute Oral Toxicity)			
	D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Skin or Eye Irritation)			
	Acute Tox. Dermal 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 Irrit. 2 - Eye Irritation Category 2			
	Flam. Liq. 4 - Flammable Liquids, Category 4			
	Skin Irrit. 2 - Skin Irritation Category 2			
	H227 - Combustible Liquid H302 - Harmful if swallowed. H312 - Harmful in contact with skin. H315 - Causes skin irritation.			
	H319 - Causes serious eye irritation.			



Section 16 Other Information (Continued)

H332 - Harmful if inhaled.

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

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