

Safety Data Sheet

according to the Model Work Health and Safety Regulations Date of issue: 22/08/2022 Revision date: 22/08/2022

Version: 1.2

<b>SECTION 1: Identification : Product ident</b>	tifier and chemical identity
1.1. Product identifier	
Trade name	: EA-50
Product code	: 3801620, 3801621, 3801622
1.2. Other means of identification	
No additional information available	
1.3. Recommended use of the chemical and	
Recommended use of the chemical and	
Restrictions on use	: Cytologic Stain : Other uses
1.4. Supplier's details	
Leica Microsystems Pty Ltd Suite 2, Level 3, Building A, Talavera Road	EBOS International 108 Wrights Road, Addington PO Box 411 Christchurch NEW ZEALAND Ph +64 3 338 0999
Macquarie Park - 2113 Australia	Fax +64 3 339 5111 www.ebos.co.nz
1.5. Emergency phone number	
Organisation/Company	Emergency number
ChemTrec	800-424-9300
International Calls (call collect)	+1 703-527-3887
Australia 24 Hr Poisons Information Centre	13 11 26
New Zealand National Poisons Centre	0800 764 766
SECTION 2: Hazards identification	
2.1. Classification of the hazardous chemica	l de la constante de
Classification according to the model Work Health	and Safety Regulations (WHS Regulations)
Flammable liquids, Category 1	H224
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2A	H319
2.2. Label elements	
Signal word (GHS-AU)	: Danger
Hazard statements (GHS-AU)	<ul> <li>H224 - Extremely flammable liquid and vapour</li> <li>H315 - Causes skin irritation</li> <li>H319 - Causes serious eye irritation</li> </ul>
Precautionary statements (GHS-AU)	<ul> <li>P210 - Keep away from heat, sparks, open flames, hot surfaces. No smoking.</li> <li>P233 - Keep container tightly closed</li> <li>P240 - Ground/bond container and receiving equipment</li> <li>P241 - Use explosion-proof equipment</li> <li>P242 - Use only non-sparking tools</li> <li>P243 - Take precautionary measures against static discharge</li> <li>P264 - Wash thoroughly after handling</li> <li>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P302+P352 - IF ON SKIN: Wash with plenty of soap and water</li> <li>P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</li> <li>P321 - Specific treatment (see supplemental first aid instruction on this label)</li> <li>P332+P313 - If skin irritation occurs: Get medical advice/attention</li> <li>P362 - Take off contaminated clothing and wash before reuse</li> <li>P370+P378 - In case of fire: Use dry chemical, foam, or water spray for extinction.</li> <li>P403+P235 - Store in a well-ventilated place. Keep cool</li> <li>P501 - Dispose of contents/container in accordance with all local/regional/national/international regulations</li> </ul>
2.3. Other hazards	

No additional information available

SECTION 3: Composition/information on ingredients

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Name	CAS-No.	Compound type	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
Ethanol	64-17-5		< 60	Not classified
methanol	67-56-1		< 30	Flam. Liq. 2, H225
Isopropanol	67-63-0		< 5	Not classified
acetic acid	64-19-7		< 3	Flam. Liq. 3, H226 Acute Tox. 5 (Oral), H303 Skin Corr. 1A, H314

SECTIO	N 4. First aid massures	
<b>SECTIO</b> 4.1.	DN 4: First aid measures Description of first aid measures	
	measures general	: Call a physician immediately.
	measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
	measures after skin contact	<ul> <li>Remove person to near an and keep connortable for breathing.</li> <li>Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.</li> </ul>
First-aid	measures after eye contact	: Rinse eyes with water as a precaution.
First-aid	measures after ingestion	: Rinse mouth. Call a physician immediately.
4.2.	Symptoms caused by exposure	
Sympto	ns/effects after skin contact	: Irritation.
4.3.	Indication of any immediate medical	attention and special treatment needed
Other m	edical advice or treatment	: Treat symptomatically.
SECTIO	ON 5: Firefighting measures	
5.1.	Extinguishing media	
Suitable	extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2.	Special hazards arising from the subs	tance or mixture
Fire haz	ard	: Highly flammable liquid and vapour.
5.3.	Special protective equipment and pr	ecautions for fire-fighters
Protecti	on during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTIO	ON 6: Accidental release measur	es
6.1.	Personal precautions, protective equ	ipment and emergency procedures
6.1.1.	For non-emergency personnel	
Emerge	ncy procedures	: No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe mist/vapours/spray.
<b>6.1.2</b> .	For emergency responders	
Protecti	ve equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2.	Environmental precautions	
Avoid re	lease to the environment. Notify author	ities if product enters sewers or public waters.
6.3.	Methods and material for containme	nt and cleaning up
Mothod	s for cloaning up	• Take up liquid spill into absorbont material. Notify authorities if product optors sowers or public waters

Methods for cleaning up

: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

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#### SECTION 7: Handling and storage, including how the chemical may be safely used

7.1.	<b>Precautions fo</b>	or safe l	nandling

Precautions for safe handling :	Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing.
Hygiene measures :	Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, including any in	compatibilities

Technical measures	: Ground/bond container and receiving equipment.
Storage conditions	: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters - exposure standards

Ethanol (64-17-5)		
USA - ACGIH	ACGIH STEL (ppm)	1000 ppm (Ethanol; USA; Short time value; TLV - Adopted
		Value)

methanol (67-56-1)		
USA - ACGIH	ACGIH TWA (ppm)	200 ppm (Methanol; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA - ACGIH	ACGIH STEL (ppm)	250 ppm (Methanol; USA; Short time value; TLV - Adopted Value)

Isopropanol (67-63-0)		
USA - ACGIH	ACGIH TWA (ppm)	200 ppm (2-propanol; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA - ACGIH	ACGIH STEL (ppm)	400 ppm (2-propanol; USA; Short time value; TLV - Adopted Value)
USA - ACGIH	Remark (ACGIH)	Eye & URT irr; CNS impair

acetic acid (64-19-7)		
USA - ACGIH	ACGIH TWA (ppm)	10 ppm (Acetic acid; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA - ACGIH	ACGIH STEL (ppm)	15 ppm (Acetic acid; USA; Short time value; TLV - Adopted Value)

#### Exposure limit values for the other components

8.2.	Monitoring		
No additio	nal information available		
8.3.	Appropriate engineering controls		
Appropriat	te engineering controls	:	Ensure good ventilation of the work station.
8.4.	Personal protective equipment		
Hand prot	ection	:	Protective gloves
Eye protec	tion	:	Safety glasses
Skin and b	ody protection	:	Wear suitable protective clothing

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Respiratory protection	: Wear respiratory protection
Environmental exposure controls	: Avoid release to the environment.

SECTION 9: Physical and chemical prop	perties
Physical state	: Liquid
Colour	: red
Odour	: Alcohol odour
Odour threshold	: No data available
рН	: 5 - 5.5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Boiling point	: No data available
Flash point	: 64 °F /18 °C
Auto-ignition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Density	: 0.79
Solubility	: No data available
Log Pow	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Explosive limits	: No data available
Minimum ignition energy	: No data available
Fat solubility	: No data available

SECTION 10: Stability and reactivity	
Reactivity	: Highly flammable liquid and vapour.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
Hazardous decomposition products	<ul> <li>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</li> </ul>

SECTION 11: Toxicological information	
Acute toxicity (oral) : N	Not classified
Acute toxicity (dermal) : N	Not classified
Acute toxicity (inhalation) : N	Not classified
Ethanol (64-17-5)	
LD50 oral rat	10740 mg/kg bodyweight (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit; Literature study)
methanol (67-56-1)	
LD50 oral rat	> 5000 mg/kg (Rat; BASF test; Literature study; 1187-2769 mg/kg bodyweight; Rat; Weight of evidence)
LD50 dermal rabbit	15800 mg/kg (Rabbit; Literature study)
LC50 inhalation rat (mg/l)	85 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	64000 ppm/4h (Rat; Literature study)
Isopropanol (67-63-0)	
LD50 dermal rabbit	12870 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 16.4; Rabbit)
LC50 inhalation rat (mg/l)	73 mg/l/4h (Rat)

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acetic acid (64-19-7)	
LD50 oral rat	3310 mg/kg bodyweight (Rat; Other; Read-across)
Skin corrosion/irritation	: Causes skin irritation.
	pH: 5 - 5.5
Serious eye damage/irritation	: Causes serious eye irritation.
	pH: 5 - 5.5
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
EA-50	
Density	0.79

#### **SECTION 12: Ecological information**

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

Ethanol (64-17-5)			
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.		
Biochemical oxygen demand (BOD)	0.8 - 0.967 g O₂/g substance		
Chemical oxygen demand (COD)	1.7 g O <sub>2</sub> /g substance		
ThOD	2.1 g O <sub>2</sub> /g substance		
BOD (% of ThOD)	0.43		
methanol (67-56-1)			
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.		
Biochemical oxygen demand (BOD)	0.6 - 1.12 g O <sub>2</sub> /g substance		
Chemical oxygen demand (COD)	1.42 g O <sub>2</sub> /g substance		
ThOD	1.5 g O <sub>2</sub> /g substance		
BOD (% of ThOD)	0.8 (Literature study)		
Isopropanol (67-63-0)			
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test)data on mobility of the substance available.		
Biochemical oxygen demand (BOD)	1.19 g O₂/g substance		
Chemical oxygen demand (COD)	2.23 g O₂/g substance		
ThOD	2.4 g O <sub>2</sub> /g substance		
acetic acid (64-19-7)			
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.		
Biochemical oxygen demand (BOD)	0.6 - 0.74 g O <sub>2</sub> /g substance		
Chemical oxygen demand (COD)	1.03 g O <sub>2</sub> /g substance		
ThOD	1.07 g O <sub>2</sub> /g substance		
2.3. Bioaccumulative potential			
Ethanol (64-17-5)			
BCF fish 1	See section 12.1 on ecotoxicology		

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Ethanol (64-17-5)		
Log Pow	See section 12.1 on ecotoxicology	
Log Koc	See section 12.1 on ecotoxicology	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
methanol (67-56-1)		
BCF fish 1	See section 12.1 on ecotoxicology	
Log Pow	See section 12.1 on ecotoxicology	
Log Koc	See section 12.1 on ecotoxicology	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
Isopropanol (67-63-0)		
Log Pow	See section 12.1 on ecotoxicology	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
acetic acid (64-19-7)		
BCF fish 1	See section 12.1 on ecotoxicology	
Log Pow	See section 12.1 on ecotoxicology	
Log Koc	See section 12.1 on ecotoxicology	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
12.4. Mobility in soil		
Ethanol (64-17-5)		
Surface tension	0.022 N/m (20 °C)	

Surface tension	0.022 N/m (20 °C)	
Log Pow	See section 12.1 on ecotoxicology	
Log Koc	See section 12.1 on ecotoxicology	
methanol (67-56-1)		
Surface tension	0.023 N/m (20 °C)	
Log Pow	See section 12.1 on ecotoxicology	
Log Koc	See section 12.1 on ecotoxicology	
Isopropanol (67-63-0)		
Surface tension	0.021 N/m (25 °C)	
Log Pow	See section 12.1 on ecotoxicology	
acetic acid (64-19-7)		
Surface tension	0.028 N/m (20 °C)	
Log Pow	See section 12.1 on ecotoxicology	
Log Koc	See section 12.1 on ecotoxicology	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.	
12.5. Other adverse effects		
Ozone	: Not classified	
020110		

#### SECTION 13: Disposal considerations

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information	
14.1. UN number	
UN-No. (IMDG)	: 1987
UN-No. (IATA)	: 1987
14.2. Proper Shipping Name - Addition	
Proper Shipping Name (IMDG)	: ALCOHOLS, N.O.S.
Proper Shipping Name (IATA)	: Alcohols, n.o.s.
14.3. Transport hazard class(es)	
IMDG	
Transport hazard class(es) (IMDG)	: 3
Danger labels (IMDG)	: 3

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Transport hazard class(es) (IATA)	: 3
Hazard labels (IATA)	: 3
14.4. Packing group	
Packing group (IMDG)	: 11
Packing group (IATA)	: 11
14.5. Environmental hazards	
Marine pollutant	: No
14.6. Special precautions for user	
Specific storage requirement	: No data available
Shock sensitivity	: No data available
14.7. Additional information	
Other information	: No supplementary information available
Transport by road and rail	
Not applicable	
Transport by sea	
UN-No. (IMDG)	: 1987
Special provisions (IMDG)	: 274
Limited quantities (IMDG)	: 1L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP8, TP28
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	: B
Air transport	
UN-No. (IATA)	: 1987
PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341

PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	364
CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A3, A180
ERG code (IATA)	:	3L

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14.8. Hazchem or Emergency Action Code

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Hazchemcode
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: Not applicable

### SECTION 15: Regulatory information

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

### HSNO Number: HSR002596

15.2. International agreements

No additional information available

#### SECTION 16: Any other relevant information

Revision date	: 22/08/2022
Classification:	
Flam. Liq. 1	H224
Skin Irrit. 2	Н315
Eye Irrit. 2A	Н319
Full text of H-statements:	
Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Liq. 1	Flammable liquids, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H224	Extremely flammable liquid and vapour
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H303	May be harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation

#### SDS Australia Leica

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product