

### Safety Data Sheet

according to the Model Work Health and Safety Regulations Date of issue: 28/11/2018 Revision date: 28/11/2018

SECTION 1: Identification : Product identifier and chemical identity 1.1. **Product identifier** Trade name : EA-50 Modified Product code : 3801680, 3801681, 3801682, 3801680E, 3801681E, 3801682E 1.2. Other means of identification No additional information available Recommended use of the chemical and restrictions on use 1.3. Recommended use : Cytologic Stain Restrictions on use : Other uses 1.4. Supplier's details Leica Microsystems Pty Ltd Suite 2, Level 3, Building A, Talavera Road Macquarie Park - 2113 Australia 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

Version: 1.0

SECTION 2: Hazards identification	
2.1. Classification of the hazardous chemic	al de la constante de la const
Classification according to the model Work Heal	h and Safety Regulations (WHS Regulations)
Flammable liquids, Category 1	H224
2.2. Label elements	
Signal word (GHS-AU)	: Danger
Hazard statements (GHS-AU)	: H224 - Extremely flammable liquid and vapour
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>P280 - Wear protective gloves/protective clothing/eye protection/face protection.</li> <li>P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower</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

Name	CAS-No.	Compound type	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
Ethanol	64-17-5		< 85	Not classified
methanol	67-56-1		< 5	Flam. Liq. 2, H225
Isopropanol	67-63-0		< 5	Not classified

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Call a poison center or a doctor if you feel unwell.
4.2. Symptoms caused by exposure	
No additional information available	
4.3. Indication of any immediate medical	l attention and special treatment needed
Other medical advice or treatment	: Treat symptomatically.
SECTION 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	
Fire hazard	: Highly flammable liquid and vapour.
5.3. Special protective equipment and pr	-
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release measur	res
6.1. Personal precautions, protective equ	Jipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protecti equipment may intervene. Do not breathe mist/vapours/spray.
6.1.2. For emergency responders	
Protective 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 release to the environment. Notify author	rities if product enters sewers or public waters.
6.3. Methods and material for containme	ent and cleaning up
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public wate
SECTION 7: Handling and storage, incl	uding how the chemical may be safely used
7.1. Precautions for safe handling	
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 or the workplace. Limit quantities of product at the minimum necessary for handling and limit the numb of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surface in the hazard area must be cleaned regularly. Do not breathe mist/vapours/spray.
Hygiene measures	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 or the workplace. Limit quantities of product at the minimum necessary for handling and limit the numb of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surface
-	<ul> <li>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 or the workplace. Limit quantities of product at the minimum necessary for handling and limit the numb of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surface in the hazard area must be cleaned regularly. Do not breathe mist/vapours/spray.</li> <li>Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>
Hygiene measures 7.2. Conditions for safe storage, including Technical measures	<ul> <li>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 or the workplace. Limit quantities of product at the minimum necessary for handling and limit the numb of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surface in the hazard area must be cleaned regularly. Do not breathe mist/vapours/spray.</li> <li>Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.</li> </ul>

### Safety Data Sheet

according to the Model Work Health and Safety Regulations

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

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

#### Exposure limit values for the other components

#### 8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls	
Appropriate engineering controls	: Ensure good ventilation of the work station.
8.4. Personal protective equipment	
Hand protection	: Protective gloves
Eye protection	: Safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear respiratory protection
Environmental exposure controls	: Avoid release to the environment.

SECTION 9: Physical and chemical prop	erties
Physical state	: Liquid
Colour	: red
Odour	: Alcohol odour
Odour threshold	: No data available
рН	: 6-6
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Boiling point	: No data available
Flash point	: 55 °F /13 °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

### Safety Data Sheet

according to the Model Work Health and Safety Regulations

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	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: Not classified
: Not classified
: 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)	
Skin corrosion/irritation	: Not classified	
	pH: 6 - 6	
Serious eye damage/irritation	: Not classified	
	pH: 6 - 6	
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 Modified		
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

### Safety Data Sheet

according to the Model Work Health and Safety Regulations

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 O <sub>2</sub> /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 O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.23 g O₂/g substance
ThOD	2.4 g O <sub>2</sub> /g substance
12.3. Bioaccumulative potential	
Ethanol (64-17-5)	
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).
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).
12.4. Mobility in soil	
Ethanol (64-17-5)	
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)	•••

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
12.5. Other adverse effects	
Ozone	: Not classified
Other adverse effects	: No additional information available
SECTION 13: Disposal considerat	ions

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			
28/11/2018	EN (English)	5/7		

### Safety Data Sheet

according to the Model Work Health and Safety Regulations

UN-No. (IATA)	: 1987
	. 1307
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
ΙΑΤΑ	
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

### Safety Data Sheet

according to the Model Work Health and Safety Regulations

according to the Model work health and safety Regulations		
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	
14.8. Hazchem or Emergency Action Code		
Hazchemcode	: Not applicable	

SECTION 15: Regulatory information			
15.1.	. Safety, health and environmental regulations/legislation specific for the substance or mixture		
No additional information available			
15.2.	International agreements		
No addi	tional information available		

SECTION 16: Any other relevant information		
Revision date	: 28/11/2018	
Classification:		
Flam. Liq. 1	H224	
Full text of H-statements:		
Flam. Liq. 1	Flammable liquids, Category 1	
Flam. Liq. 2	Flammable liquids, Category 2	
H224	Extremely flammable liquid and vapour	
H225	Highly flammable liquid and vapour	

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