

Safety Data Sheet

according to the Model Work Health and Safety Regulations Date of issue: 30/11/2018 Revision date: 30/11/2018

		in health and safety negulations	
	Date of issue: 30/11/2018	Revision date: 30/11/2018	Version: 1.0
SECTION 1: Identification : Pro	duct identifier and che	mical identity	
1.1. Product identifier			
Trade name	: Reagent A	lcohol 95%	
Product code	: 3803682; 3	3801832	
1.2. Other means of identification	an		
No additional information available	/II		
	hemical and restrictions on u		
Recommended use		istology and Cytology Dehydrating Agen	it .
Restrictions on use	: Other uses	5	
1.4. Supplier's details			
Leica Microsystems Pty Ltd			
Suite 2, Level 3, Building A, Talavera Ro	ad		
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 C	entre	13 11 26	
SECTION 2: Hazards identificat	ion		
2.1. Classification of the hazard	ous chemical		
Classification according to the model N	Nork Health and Safety Regu	ulations (WHS Regulations)	
Flammable liquids, Category 1	H224		
2.2. Label elements			
Signal word (GHS-AU)	: Danger		
Hazard statements (GHS-AU)	: H224 - Ext	remely flammable liquid and vapour	
Precautionary statements (GHS-AU)	P233 - Kee P240 - Gro P241 - Use P242 - Use P243 - Tak	ep away from heat, sparks, open flames, ep container tightly closed bund/bond container and receiving equi e explosion-proof equipment e only non-sparking tools e precautionary measures against static ar protective gloves/protective clothing	pment c discharge

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P370+P378 - In case of fire: Use dry chemical, foam, or water spray for extinction.

P403+P235 - Store in a well-ventilated place. Keep cool P501 - Dispose of contents/container in accordance with all local/regional/national/international regulations

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

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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 att	ention 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 substan	ice or mixture
Fire hazard	: Highly flammable liquid and vapour.
5.3. Special protective equipment and preca	utions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release measures	
6.1. Personal precautions, protective equipment	nent 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 protective 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 authorities	s if product enters sewers or public waters.
6.3. Methods and material for containment	and cleaning up
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
SECTION 7: Handling and storage, includi	ing 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 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.
Hygiene measures	: 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.
7.2. Conditions for safe storage, including an	y incompatibilities
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 p	protection
8.1. Control parameters - exposure standard	ls

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

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)

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.

Physical state : Liquid
Colour : Colourless
Odour : Alcohol odour
Odour threshold : No data available
pH : No data available
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

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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.

SECTION 11: Toxicological information	tion	
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: 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)	
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)	
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)	
Skin corrosion/irritation	: N	ot classified	
Serious eye damage/irritation	us eye damage/irritation : Not classified		
Respiratory or skin sensitisation	: Not classified		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	genicity : Not classified		
Reproductive toxicity	: N	ot classified	
STOT-single exposure	: N	ot classified	
OT-repeated exposure : Not classified		ot classified	
Aspiration hazard	spiration hazard : Not classified		
Reagent Alcohol 95%			
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

12.2. Persistence and degradability

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 ₂ /g substance

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Ethanol (64-17-5)	
Chemical oxygen demand (COD)	1.7 g O ₂ /g substance
ThOD	2.1 g O ₂ /g substance
BOD (% of ThOD)	0.43
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 ₂ /g substance
Chemical oxygen demand (COD)	2.23 g O ₂ /g substance
ThOD	2.4 g O ₂ /g substance
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 ₂ /g substance
Chemical oxygen demand (COD)	1.42 g O ₂ /g substance
ThOD	1.5 g O ₂ /g substance
BOD (% of ThOD)	0.8 (Literature study)
2.3. 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).
Isopropanol (67-63-0)	
Log Pow	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
methanol (67-56-1)	
BCE fish 1	See section 12.1 on ecotoxicology

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).
Isopropanol (67-63-0)	
Log Pow	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).

Mobility in soil 12.4.

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
Isopropanol (67-63-0)	
Surface tension	0.021 N/m (25 °C)
Log Pow	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
12.5. Other adverse effects	
Ozone	: Not classified
Other adverse effects	: No additional information available

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

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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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	3	
ΙΑΤΑ		
Transport hazard class(es) (IATA)	: 3	
Hazard labels (IATA)	: 3	
	- ANA	
	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)	: 17	
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)	: В	
Air transport		
	. 1007	
UN-No. (IATA)	: 1987	
PCA Excepted quantities (IATA)	: E2	
PCA Limited quantities (IATA)	: Y341	

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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 regulation	ations/legislation specific for the substance or mixture	
No additional information available		
15.2. International agreements		
No additional information available		
SECTION 16: Any other relevant informa	tion	
Revision date	: 30/11/2018	
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	

SDS Australia Leica

H225

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

Highly flammable liquid and vapour