

→ Safety Data Sheet

According to SANS 10234:2019 and SANS 11014:2010

Issue date:13/07/2020 Revision date: 13/07/2025 : Version: 1.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture

Trade name : METHYLATED SPIRITS (COLOURED)

Product code : 113170xxx

Other means of identification : denatured ethanol

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended uses and restrictions : For laboratory use only

1.3. Supplier's details

Labchem (Pty)Ltd 6 Wakefield Road Founders Hill

1609 Johannesburg - South Africa T +27 11 452 1116 - F +27 86 588 0293 techlab@labchem.co.za - www.labchem.co.za

1.4. Emergency telephone number

Emergency number : +27 11 452 1116

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Flammable liquids, Category 2 H225
Skin corrosion/irritation, Category 3 H316
Serious eye damage/eye irritation, H318

Category 1

Full text of H statements : see section 16

2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS-ZA)





GHS02

GHS05

Signal word (GHS-ZA) : Danger
Hazardous ingredients : n-butanol

Hazard statements (GHS-ZA) : H225 - Highly flammable liquid and vapour.

H316 - Causes mild skin irritation H318 - Causes serious eye damage.

Precautionary statements (GHS-ZA) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment.

P241 - Use explosion-proof equipment.

P242 - Use non-sparking tools.

P243 - Take action to prevent static discharges.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor.

P332+P313 - If skin irritation occurs: Get medical advice/attention. P370+P378 - In case of fire: Use media other than water to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects

: Highly flammable liquid and vapour, Causes mild skin irritation, Causes serious eye damage.

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
ethanol	(CAS-No.) 64-17-5	≥ 84	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Aquatic Acute Not classified
2-propanol	(CAS-No.) 67-63-0	4 – 5	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) STOT SE 3, H336 Aquatic Acute Not classified
n-butanol	(CAS-No.) 71-36-3	≤3	Flam. Liq. 3, H226 Acute Tox. 5 (Oral), H303 Acute Tox. 5 (Dermal), H313 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 Aquatic Acute Not classified

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

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. Take off immediately all contaminated clothing. If skin irritation

occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Serious damage to eyes.

4.3. Indication of any immediate medical attention and special treatment needed

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 substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Hazardous decomposition products in case of

fire

: Toxic fumes may be released.

5.3. Advice for firefighters

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 and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin

and eyes.

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.

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.

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Hygiene measures

According to SANS 10234:2019 and SANS 11014:2010

Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

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. Avoid contact with skin and eyes.

: Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethanol (64-17-5)		
South Africa - Occupational Exposure Limits (Recommended Limits)		
Local name	Ethanol (Ethyl alcohol)	
OEL TWA (mg/m³)	1900 mg/m³	
OEL TWA (ppm)	1000 ppm	
Regulatory reference	Government Notice R: 1179	

2-propanol (67-63-0)

South Africa - Occupational Exposure Limits (Recommended Limits)

South Africa - Occupational Exposure Limits (Recommended Limits)		
Local name	Propan-2-ol (Isopropyl alcohol)	
OEL TWA (mg/m³)	960 mg/m³ Isopropyl alcohol 980 mg/m³ Propan-2-ol	
OEL TWA (ppm)	400 ppm	
OEL STEL (mg/m³)	1225 mg/m³	
OEL STEL (ppm)	500 ppm	
Remark	Sk	
Regulatory reference	Government Notice. R: 1179	

n-butanol (71-36-3)

South Africa - Occupational Exposure Limits (Recommended Limits)

County into a Cocapational Exposure Limite (Neconimental Limite)		
Local name	Butan-1-ol (n-Butyl Alcohol)	
OEL STEL (mg/m³)	150 mg/m³	
OEL STEL (ppm)	50 ppm	
Remark	Sk	
Regulatory reference	Government Notice. R: 1179	

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves
Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Full face mask with filter type A at conc. in air > exposure limit

Personal protective equipment symbol(s):











8.4. Exposure limit values for the other components

No additional information available

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According to SANS 10234:2019 and SANS 11014:2010

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Appearance : No data available Colour : No data available : No data available Odour Odour threshold No data available рΗ : No data available pH solution : No data available Relative evaporation rate (butylacetate=1) : No data available Relative evaporation rate (ether=1) : No data available Melting point Not applicable Freezing point : No data available Boiling point : No data available No data available Flash point Auto-ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) : Not applicable Vapour pressure No data available Vapour pressure at 50 °C No data available Relative vapour density at 20 °C : No data available Relative density : No data available Relative density of saturated gas/air mixture No data available Density No data available Relative gas density No data available : No data available : No data available : No data available

Solubility : No data available
Partition coefficient n-octanol/water (Log Pow) : No data available
Partition coefficient n-octanol/water (Log Kow) : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available
Lower explosive limit (LEL) : No data available

Upper explosive limit (UEL) 9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

: No data available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified

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According to SANS 10234:2019 and SANS 11014:2010

ccording to SANS 10234:2019 and SANS 1101	
Acute toxicity (inhalation)	: Not classified
ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 15800 mg/kg bodyweight (Rabbit, Experimental value, Dermal)
2-propanol (67-63-0)	
LD50 oral rat	5840 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	16400 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 14 day(s))
n-butanol (71-36-3)	
LD50 oral rat	≈ 2292 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	≈ 3430 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Skin corrosion/irritation	: Causes mild skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity : Not classified	
0 ,	: Not classified
Carcinogenicity	. Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
n-butanol (71-36-3)	
LOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat

Aspiration hazard : Not classified

SECTION 12: Ecological information

1	12 1	Tox	icity
	14.	IUA	ICILV

NOAEL (oral, rat, 90 days)

: The product is not considered harmful to aquatic organisms nor to cause long-term adverse Ecology - general

125 mg/kg bodyweight Animal: rat

effects in the environment.

Hazardous to the aquatic environment, short-

term (acute)

: Not classified

Hazardous to the aquatic environment, long-

: Not classified

ethanol (64-17-5)		
LC50 fish 1	15300 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)	
EC50 72h algae (1)	275 mg/l (Equivalent or similar to OECD 201, Chlorella vulgaris, Static system, Fresh water, Experimental value, Growth rate)	
BCF fish 1	1 (Other, 72 h, Cyprinus carpio, Static system, Fresh water, Read-across)	
Partition coefficient n-octanol/water (Log Pow)	-0.31 (Experimental value)	
Partition coefficient n-octanol/water (Log Koc)	0.2 (log Koc, Experimental value)	
2-propanol (67-63-0)		
LC50 fish 1	9640 – 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)	
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)	
Partition coefficient n-octanol/water (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
n-butanol (71-36-3)		
LC50 fish 1	1376 mg/l Test organisms (species): Pimephales promelas	
EC50 Daphnia 1	1328 mg/l Test organisms (species): Daphnia magna	
NOEC (chronic)	4.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
12.2. Persistence and degradability		
METHYLATED SPIRITS (COLOURED)		
Persistence and degradability	No additional information available	

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According to SANS 10234:2019 and SANS 11014:2010

ethanol (64-17-5)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.8 – 0.967 g O ₂ /g substance
Chemical oxygen demand (COD)	1.7 g O₂/g substance
ThOD	2.1 g O₂/g substance
BOD (% of ThOD)	0.43
2-propanol (67-63-0)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
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 ₂ /g substance
12.3. Bioaccumulative potential	2.4 g O ₂ ig Substantes
METHYLATED SPIRITS (COLOURED)	
Bioaccumulative potential	No additional information available
·	The desired in the second of t
ethanol (64-17-5)	
BCF fish 1	1 (Other, 72 h, Cyprinus carpio, Static system, Fresh water, Read-across)
Partition coefficient n-octanol/water (Log Pow)	-0.31 (Experimental value)
Partition coefficient n-octanol/water (Log Koc)	0.2 (log Koc, Experimental value)
Bioaccumulative potential	Not bioaccumulative.
2-propanol (67-63-0)	
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)
Partition coefficient n-octanol/water (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
12.4. Mobility in soil	
METHYLATED SPIRITS (COLOURED)	
Mobility in soil	No additional information available
ethanol (64-17-5)	
Surface tension	22.31 mN/m (20 °C, 100 %)
Partition coefficient n-octanol/water (Log Pow)	-0.31 (Experimental value)
Partition coefficient n-octanol/water (Log Koc)	0.2 (log Koc, Experimental value)
Ecology - soil	Highly mobile in soil.
2-propanol (67-63-0)	
Surface tension	0.021 N/m (25 °C)
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)
Partition coefficient n-octanol/water (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
12.5. Other adverse effects	
Ozone	: Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

Other adverse effects

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

: No additional information available

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA		
14.1. UN number				
1170	1170	1170		
14.2. Proper Shipping Name	14.2. Proper Shipping Name			
ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Ethanol solution		
14.3. Transport hazard class(es)				
3	3	3		

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According to SANS 10234:2019 and SANS 11014:2010

SANS	IMDG	IATA
3	3	Not applicable
44.4 Dealder was an		140t applicable
14.4. Packing group		
l II	II	ll
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
	:	, j
No supplementary information available		

14.6. Special precautions for user

- SANS

Special provisions (SANS) : 144 Limited quantities (SANS) : 1L Limited quantities (SANS) : 1L

Packagings, large packagings and IBCs

Packing instructions (SANS)

: T4

Portable tank and bulk containers instructions

: P001, IBC02

Portable tank and bulk container special

provisions (SANS)

: TP1

- IMDG

Special provisions (IMDG) : 144 Limited quantities (IMDG) : 1L Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T4 : TP1 Tank special provisions (IMDG)

: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS EmS-No. (Fire)

: S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS EmS-No. (Spillage)

Stowage category (IMDG) : A

Properties and observations (IMDG) : Colourless, volatile liquids.Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19%

Miscible with water.

- IATA

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) : 353 PCA max net quantity (IATA) : 5L : 364 CAO packing instructions (IATA) CAO max net quantity (IATA) : 60L

Special provisions (IATA) : A3, A58, A180

ERG code (IATA) : 3L

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

Safety, health, and environmental national regulations specific for the product

: SANS 10234:2008; SANS 11014:2010; SANS 10228:2012; SANS 10229:2010; SANS Regulatory reference

10232(1,2,4), SANS 10231:2018; Occupational Health and Safety Act 85 of 1993; National

Road Traffic Act 93 of 1996.

SECTION 16: Other information

: 13/07/2020 Issue date Revision date : 13/07/2025

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According to SANS 10234:2019 and SANS 11014:2010

Full text of H-statements:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H303	May be harmful if swallowed
H313	May be harmful in contact with skin
H315	Causes skin irritation.
H316	Causes mild skin irritation
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

SDS South Africa

The data provided in this Safety Data Sheet (SDS) is correct to the best of our knowledge. The data relates to the specific product as named and is ntended as a guide to the safe handling of the product in all its facets. The data may no longer be valid if the product is used in any process or in combination with other products. This SDS is not a quality specification nor any form of guarantee.

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