



M & L LABS

Certificate/Report

RESULTS REPORTED RELATED ONLY TO ITEMS TESTED

Ref. No : 11077309

Issued at : Johannesburg

Date : 11/05/2020

Page : 1 of 1

COMPANY NAME : MIDWAY CASH AND CARRY PTY LTD
ADDRESS : 55 CHRIS HANI ROAD, SOWETO 1818
SUBJECT : QUANTITATIVE SUSPENSION TEST FOR THE EVALUATION
 OF BACTERICIDAL ACTIVITY OF CHEMICAL DISINFECTANTS
 SANS 5261:2009 (SANS 490:2013)
MARKED : MIDWAY CASH AND CARRY LIQUID HAND SANITIZER
ACTIVE INGREDIENT : ALCOHOL
INSTRUCTED BY : KALLINA
LAB NO. : P230997
RECEIVED ON : 05/05/2020
DATE ANALYSED : 05/05/2020

Results:

Bacterial Culture	Initial test suspension	Turbidity of sample after 48 hours	Pass/Fail
<i>P. aeruginosa</i> ATCC 15442	2.4x10 ⁷	NEGATIVE	PASS
<i>S. aureus</i> ATCC 6538	1.9x10 ⁷	NEGATIVE	PASS
<i>E. coli</i> ATCC 8739	1.7x10 ⁷	NEGATIVE	PASS
Test method and validation : SANS 5261:2009 (SANS 490:2013)			
Dilution: Neat			
Contact Time : 60 seconds			
Incubation Temperature: 37°C			
Test Temperature : 20°C			

There was no visible growth after the initial incubation period of 48 hours. Visible growth was observed after re-inoculation, proving that the test sample killed the bacteria in the original test organism suspension.

Conclusion:

The product **complied** with the pass requirements of SANS 490:2013 as stipulated in SANS 5261:2009.

TECHNICAL SIGNATORY
 T. N. CARAZA

Authorised Signature (original blue ink)



Certificate/Report

RESULTS REPORTED RELATED ONLY TO ITEMS TESTED

COMPANY NAME : MIDWAY CASH AND CARRY PTY LTD
ADDRESS : 55 CHRIS HANI ROAD, SOWETO, 1818
SUBJECT : QUANTITATIVE SUSPENSION TEST FOR THE EVALUATION OF
 BACTERICIDAL ACTIVITY OF CHEMICAL DISINFECTANTS
 AND ANTISEPTICS SANS 51276 (EN1276): DILUTION-NEUTRALIZATION
MARKED : LIQUID HAND SANITISER
ACTIVE INGREDIENT : ALCOHOL BASED
INSTRUCTED BY : KALLINA
LAB NO. : P230950
RECEIVED ON : 24/04/2020
DATE ANALYSED : 28/04/2020

Results:

Table 1

Bacterial Culture	Initial test suspension	Log Reduction
<i>E. coli</i> ATCC 10536	3.8x10 ⁷	>5.43
<i>P. aeruginosa</i> ATCC 15442	3.2x10 ⁷	>5.36
<i>S. aureus</i> ATCC 6538	4.4x10 ⁷	>5.49
<i>E. hirae</i> ATCC 10541	2.1x10 ⁷	>5.17
Test method and validation : SANS 51276:2011 (EN 1276)		
Dilution: Neat		
Contact Time : 1 minute		
Interfering solution : 0.3g/l Bovine serum albumin		
Test Temperature : 20°C		
Incubation temperature : 37°C		
Neutralizing solution : Neutralizing fluid		

Conclusion:

- The product **complied** with the criteria indicated under the "Pass Requirements" of SANS 51276 (EN1276) standard (obligatory conditions) which requires at least a 99.999% kill (5 log reduction).

TECHNICAL SIGNATORY
 TING ABAZA

 Authorised Signature (original blue ink)



Certificate/Report

RESULTS REPORTED RELATED ONLY TO ITEMS TESTED

TEST VALIDITY

For each test organism:

- N is between 1.5×10^8 and 5.0×10^8 ($8.17 \leq \log N \leq 8.70$)
- N_0 is between 1.5×10^7 and 5.0×10^7 ($7.17 \leq \log N \leq 7.70$)
- N_{V0} is between 30 and 160 (3.0×10^1 and 1.6×10^2)
- A, B, C are equal to or greater than $0.5 \times N_{V0}$
- Control of weighted mean counts: quotient is not lower than 5 and not higher than 15
-

VALIDATIONS AND CONTROLS

Table 2

Enterococcus hirae ATCC 10541

Validation suspension			Experimental Conditions Control A			Neutralizer Control B			Method Validation C (Neat product concentration)		
		Ave			Ave			Ave			Ave
Vc1	62	59.5	Vc1	72	74	Vc1	60	57.5	Vc1	50	55
Vc2	57		Vc2	76		Vc2	55		Vc2	60	
0.5x 59.5 (N _{v0})= 29.8											
Is the N _{v0} value between 30-160: YES											
Is the Experimental Condition A $\geq 0.5 \times N_{v0}$ value: YES											
Is the Neutralizer Condition B $\geq 0.5 \times N_{v0}$ value: YES											
Is the Method Validation C $\geq 0.5 \times N_{v0}$ value: YES											

Table 3

Escherichia coli ATCC 10536

Validation suspension			Experimental Conditions Control A			Neutralizer Control B			Method Validation C (Neat product concentration)		
		Ave			Ave			Ave			Ave
Vc1	58	55	Vc1	49	50	Vc1	63	66	Vc1	59	51.5
Vc2	52		Vc2	51		Vc2	69		Vc2	44	
0.5x 55 (N _{v0})= 27.5											
Is the N _{v0} value between 30-160: YES											
Is the Experimental Condition A $\geq 0.5 \times N_{v0}$ value: YES											
Is the Neutralizer Condition B $\geq 0.5 \times N_{v0}$ value: YES											
Is the Method Validation C $\geq 0.5 \times N_{v0}$ value: YES											

TECHNICAL SIGNATORY
 T. N. A. B. A. Z. A.

Authorised Signature (original blue ink)

All services are rendered in accordance with Bureau Veritas M&L Laboratory Services (Pty) Ltd General Terms and conditions of Business, which has been supplied to you, this certificate cannot be reproduced except in full without the written consent of M and L Laboratory Services.



Certificate/Report

RESULTS REPORTED RELATED ONLY TO ITEMS TESTED

Table 4

Pseudomonas aeruginosa ATCC 15442

Validation suspension			Experimental Conditions Control A			Neutralizer Control B			Method Validation C (Neat product concentration)		
		Ave			Ave			Ave			Ave
Vc1	39	37	Vc1	58	49	Vc1	53	48	Vc1	50	45.5
Vc2	35		Vc2	40		Vc2	43		Vc2	41	
0.5x 37 (Nvo)= 18.5											
Is the Nvo value between 30-160: YES											
Is the Experimental Condition A $\geq 0.5 \times Nvo$ value: YES											
Is the Neutralizer Condition B $\geq 0.5 \times Nvo$ value: YES											
Is the Method Validation C $\geq 0.5 \times Nvo$ value: YES											

Table 5

Staphylococcus aureus ATCC 6538

Validation suspension			Experimental Conditions Control A			Neutralizer Control B			Method Validation C (Neat product concentration)		
		Ave			Ave			Ave			Ave
Vc1	68	64	Vc1	76	71	Vc1	54	56.5	Vc1	70	72.5
Vc2	60		Vc2	66		Vc2	59		Vc2	75	
0.5x 64 (Nvo)= 32											
Is the Nvo value between 30-160: YES											
Is the Experimental Condition A $\geq 0.5 \times Nvo$ value: YES											
Is the Neutralizer Condition B $\geq 0.5 \times Nvo$ value: YES											
Is the Method Validation C $\geq 0.5 \times Nvo$ value: YES											

TECHNICAL SIGNATORY

T. NGABAZA

 Authorised Signature (original blue ink)



M & L LABS

Certificate/Report

RESULTS REPORTED RELATED ONLY TO ITEMS TESTED

Ref. No : 11087800

Issued at : Johannesburg

Date : 29/05/2020

Page : 1 of 4

COMPANY NAME : MIDWAY CASH AND CARRY PTY LTD
ADDRESS : 55 CHRIS HANI ROAD, SOWETO, 1818
SUBJECT : QUANTITATIVE SUSPENSION TEST FOR THE EVALUATION OF
BACTERICIDAL ACTIVITY OF CHEMICAL DISINFECTANTS
AND ANTISEPTICS SANS 53727 (EN13727): DILUTION-NEUTRALIZATION
METHOD
MARKED : DERMA DROP LIQUID HAND SANITISER
APPEARANCE : CLEAR LIQUID
ACTIVE INGREDIENT : ALCOHOL BASED
NEUTRALIZING AGENT : NEUTRALIZING FLUID
STORAGE CONDITIONS : KEEP AWAY FROM DIRECT SUNLIGHT
INSTRUCTED BY : KALLINA
LAB NO. : P231133
RECEIVED ON : 20/05/2020
DATE ANALYSED : 22/05/2020

EXPERIMENTAL CONDITIONS:

Obligatory conditions
test organisms:

Enterococcus hirae ATCC 10541

Pseudomonas aeruginosa ATCC 15442

Staphylococcus aureus ATCC 6538

Test temperature:

20°C

Contact time:

1 minute

Interfering substance:

0.3g/l Bovine serum albumin (clean conditions)

Test incubation temperature:

37°C

PASS REQUIREMENTS:

The product shall demonstrate at least a 5 decimal log reduction when diluted with hard water/or undiluted and tested under obligatory test conditions. At least one of the test concentrations will demonstrate a log reduction of less than 5 log.

TECHNICAL SIGNATORY
T. NGABAZA



Authorised Signature (original blue ink)



M & L LABS

Certificate/Report

RESULTS REPORTED RELATED ONLY TO ITEMS TESTED

Ref. No : 11087800

Issued at : Johannesburg

Date : 29/05/2020

Page : 2 of 4

TEST VALIDITY

For each test organism:

- N is between 1.5×10^8 and 5.0×10^8 ($8.17 \leq \log N \leq 8.70$)
- N_0 is between 1.5×10^7 and 5.0×10^7 ($7.17 \leq \log N_0 \leq 7.70$)
- N_{V0} is between 30 and 160 (3.0×10^1 and 1.6×10^2)
- A, B, C are equal to or greater than $0.5 \times N_{V0}$
- Control of weighted mean counts: quotient is not lower than 5 and not higher than 15

RESULTS:

Pseudomonas aeruginosa ATCC 15442

Table 1: N and N_0 values

Dilution	Vc1	Vc2	Average N(wm)	Log N	N_0 (N/10)	Log N_0
10^{-6}	344	336	3.6×10^8	8.56	3.6×10^7	7.56
10^{-7}	42	35				
Is Log N between 8.17 and 8.70: Yes						
Is Log N_0 between 7.17 and 7.70: Yes						
Control of weighted mean counts: 8.83						

Table 2: Test Log Reduction Values

Product Concentration	Vc1	Vc2	Na (Ave Vc1 & Vc2 x 10)	Log Na	Log Reduction (No: 7.56)
1%	>330	>330	>3300	>3.52	<4.04
Neat	<14	<14	<140	<2.15	>5.41

Staphylococcus aureus ATCC 6538

Table 3: N and N_0 values

Dilution	Vc1	Vc2	Average N(wm)	Log N	N_0 (N/10)	Log N_0
10^{-6}	322	311	3.5×10^8	8.54	3.5×10^7	7.54
10^{-7}	36	42				
Is Log N between 8.17 and 8.70: Yes						
Is Log N_0 between 7.17 and 7.70: Yes						
Control of weighted mean counts: 8.12						

TECHNICAL SIGNATORY
 T. N. ARATA

At

Authorised Signature (original blue ink)



M & L LABS

Certificate/Report

RESULTS REPORTED RELATED ONLY TO ITEMS TESTED

Table 4: Test Log Reduction Values

Product Concentration	Vc1	Vc2	Na (Ave Vc1&Vc2x10)	Log Na	Log Reduction (No:7.54)
1%	>330	>330	>3300	>3.52	<4.02
Neat	<14	<14	<140	<2.15	>5.39

Enterococcus hirae ATCC 10541

Table 5: N and N₀ values

Dilution	Vc1	Vc2	Average N(wm)	Log N	N ₀ (N/10)	Log N ₀
10 ⁻⁶	318	326	3.6x10 ⁸	8.56	3.6x10 ⁷	7.56
10 ⁻⁷	36	43				
Is Log N between 8.17 and 8.70: Yes						
Is Log N ₀ between 7.17 and 7.70: Yes						
Control of weighted mean counts: 8.15						

Table 6: Test Log Reduction Values

Product Concentration	Vc1	Vc2	Na (Ave Vc1&Vc2x10)	Log Na	Log Reduction (No:7.56)
1%	>330	>330	>3300	>3.52	<4.02
Neat	<14	<14	<140	<2.15	>5.41

VALIDATIONS AND CONTROLS

Table 7: Enterococcus hirae ATCC 10541

Validation suspension			Experimental Conditions Control A			Neutralizer Control B			Method Validation C (Neat product concentration)		
	Ave			Ave		Ave		Ave		Ave	
Vc1	77	69.5	Vc1	46	51.5	Vc1	49	50	Vc1	42	42
Vc2	62		Vc2	57		Vc2	51		Vc2	42	
0.5x69.5 (Nvo) = 34.8											
Is the Nvo value between 30-160: YES											
Is the Experimental Condition A ≥ 0.5xNvo value: YES											
Is the Neutralizer Condition B ≥ 0.5xNvo value: YES											
Is the Method Validation C ≥ 0.5xNvo value: YES											

TECHNICAL SIGNATORY
 T. NGABATA

 Authorised Signature (original blue ink)



M & L LABS

Certificate/Report

RESULTS REPORTED RELATED ONLY TO ITEMS TESTED

Table 8: *Pseudomonas aeruginosa* ATCC 15442

Validation suspension			Experimental Conditions Control A			Neutralizer Control B			Method Validation C (Neat product concentration)		
		Ave			Ave			Ave			Ave
Vc1	71	68	Vc1	51	54	Vc1	43	57.5	Vc1	33	34.5
Vc2	65		Vc2	57		Vc2	52		Vc2	36	
0.5x68 (Nvo)= 34											
Is the Nvo value between 30-160: YES											
Is the Experimental Condition A ≥ 0.5xNvo value: YES											
Is the Neutralizer Condition B ≥ 0.5xNvo value: YES											
Is the Method Validation C ≥ 0.5xNvo value: YES											

Table 9: *Staphylococcus aureus* ATCC 6538

Validation suspension			Experimental Conditions Control A			Neutralizer Control B			Method Validation C (Neat product concentration)		
		Ave			Ave			Ave			Ave
Vc1	46	47	Vc1	51	53.5	Vc1	34	36.5	Vc1	52	49
Vc2	48		Vc2	56		Vc2	39		Vc2	46	
0.5x 47 (Nvo)= 23.5											
Is the Nvo value between 30-160: YES											
Is the Experimental Condition A ≥ 0.5xNvo value: YES											
Is the Neutralizer Condition B ≥ 0.5xNvo value: YES											
Is the Method Validation C ≥ 0.5xNvo value: YES											

Conclusion

The product tested as **neat complied** with the criteria indicated under the "Pass Requirements" of SANS 53727 (EN 13727) standard (obligatory conditions) which requires at least a 99.999% kill (5 log reduction).

TECHNICAL SIGNATORY
 T. NGABAZA

 Authorised Signature (original blue ink)



Certificate/Report

RESULTS REPORTED RELATED ONLY TO ITEMS TESTED

+27 11 661 7900
+27 11 496 2238
joanne.barton@bureauveritas.com
www.bureauveritas.com

COMPANY NAME : MIDWAY CASH & CARRY (PTY) LTD
ADDRESS : 55 CHRIS HANI RD, PROTEA SOUTH, JHB
HAND SANITIZER
PRODUCT : 1
NO. SAMPLES SUBMITTED : N/A
BARCODE :
DATE OF MANUFACTURE : N/A
EXPIRY DATE : N/A
BATCH NUMBER : N/A
INSTRUCTED BY : NAINESH
ORDER NO. : COD
RECEIVED ON : 11/06/2020
LAB NO(S) : P121411
DATE ANALYSED : 11/06/2020 - 19/06/2020

Test Reference: A.O.A.C. 18th Edition

Composition: NULL

TEST	METHOD	RESULTS	UNITS
pH	AOAC 18TH edn	8.2	
Alcohol content (Ethanol)	GC-FID	78	% V/V

Hermina Ramela

TECHNICAL SIGNATORY FOOD

Denotes test method is outsourced

- o Refer to terms and conditions www.bureauveritas.co.za
- o This report relates to only test items listed herein and analysis on an as received basis.
These tests do not apply to any other samples of a similar nature.
- o This certificate cannot be reproduced except in full without the written consent of M and L Laboratory Services (Pty) Ltd.



TEST REPORT

REPORT NO.: AS-20-197

PAGE 1 OF 2

CERTIFICATE OF ANALYSIS No.: AS20-197

For: **MIDWAY CASH & CARRY**

RESULTS "ALCOHOL" CONTENT of HAND SANITIZER

1. Preamble

- 1.1 At present, alcohol-based hand sanitizers are the only known means for rapidly and effectively inactivating a wide array of potentially harmful microorganisms on hands.
- 1.2 The best effective means of determining the type and amount of alcohol used in the formulation is by Gas Chromatography.
- 1.3 The tests performed by AIRSEP follow the **WHO Specifications** and determine the alcohol content by means of a Gas Chromatographic analysis using certified reference standards.
- 1.4 All our instruments used are under constant validation protocol and comply with the ISO 17025 standard requirements.

2. Sample Information

PRODUCT	Derma Drop : Liquid Hand Sanitizer		
Batch No.	002823001183	Batch Weight	
Production Date	25/05/2020	Report Date	08/06/2020

3. Test Data

Test Item	WHO Specification	SANS 490 Hygienic Handrub	Result
Appearance	Homogeneous liquid	Homogeneous liquid	Homogeneous liquid
pH	-	-	7.05
Density	-	-	0.8838 g/cm ³
Glycerol (% v/v)	1.45	-	0.367 %
Hydrogen Peroxide	0.125%	-	0.112 %
Alcohol as Ethanol (% v/v)	80 ±5 %	60 %	77.10 %
TOTAL ALCOHOL			77.10 %

TEST REPORT

REPORT NO.: AS-20-197
PAGE 2 OF 2

CERTIFICATE OF ANALYSIS No.: AS20-197

For: **MIDWAY CASH & CARRY**

4. Comment

- 4.1 The WHO consensus of opinion of a WHO expert group recommend that hand rub formulations complying with WHO Specifications can be used for both hygienic hand antisepsis and for pre-surgical hand preparation.
- 4.2 The microbial activity of the WHO recommended formulation was tested by WHO reference Laboratories according to EN standards (EN1500). Their activity was found to be equivalent to the reference substance (isopropanol 60%v/v) for hygienic hand antisepsis.

5. Conclusion

- 5.1 Product "Liquid Hand Sanitizer" **COMPLIES** as an alcoholic-based hygienic handrub.
- 5.2 No further bacterial testing required as the alcohol content complies with WHO Specifications – See Comment 4.2.
- 5.3 This complies with NRCS VC 9013 which embodies SANS 54885 and SANS 490.

Indemnity Clause

"No warranties or guarantees are given by Airsep SA cc, its employees, affiliates, consultants, sub-contractors or representative regarding the accuracy or correctness of the above tests and Airsep SA cc, its employees, affiliates, consultants, sub-contractors or representatives are therefore indemnified, in the absence of gross negligence or wilful misconduct, against any and all damages, losses, claims and demands, including legal fees and expenses of whatsoever nature in respect of any damages suffered, directly or indirectly, resulting from the above tests."

Dr RF van de Water
Responsible Laboratory Manager

Date: 08 June 2020



Analytical Consultants

Reg. No.: CK1997/68409/23 • Vat. No.: 4370162887

Pr.Sci.Nat. (Practice number 114194)

This document has been produced electronically and is valid without a signature



13A Osborne Lane,
Bedfordview 2007
P.O. Box 954,
Bedfordview 2008
South Africa
Telephone : 011 615-2855
Mobile : 082 850-5891
Telefax : 086 718-6968
E-mail : airsep@vodamail.co.za

AIRSEP LABS



55 Chris Hani Rd
Protea South,
JHB,
1840
010 446 1905

SAFETY DATA SHEET

WATERLESS HANDSANITIZER

Revision: 01/2020 | Date Issued: 01/2020

COMPANY DETAILS			
NAME:	Midway Cash & Carry (Pty) Ltd	EMERGENCY TEL:	27 82 776 1898
ADDRESS:	55 Chris Hani Rd, Protea South, JHB, 1820	TEL:	27 82 776 1898
MANUFACTURER:	Midway Cash & Carry (Pty) Ltd	ADDRESS:	55 Chris Hani Rd, Protea South, JHB, 1820
SECTION1-PRODUCT AND COMPANY IDENTIFICATION			
TRADE NAME:	Waterless Hand Sanitizer		
CHEMICAL FAMILY:	Alcohol blend		
CHEMICAL NAME:	Not Applicable (mixture)		
SYNONYMS:	Disinfectant hand and surface cleaner		
CHEMICAL ABSTRACT NO:	Mixture N/A		
HAZCHEM CODE:	3[Y]E		
UN NO:	1993 Flammable liquid		
SECTION2-HAZARDOUS IDENTIFICATION			
MAIN HAZARD:	May be harmful if swallowed	CHEMICAL HAZARD:	None known
FLAMMABILITY:	Yes	BIOLOGICAL HAZARD:	None known
REPRODUCTIVE HAZARD:	None known	MUTAGENIC:	No
CARCINOGENIC:	No	NEUROTOXIN:	No

Midway Cash & Carry (Pty) Ltd - Reg # 2014/260391/07

HEALTH HAZARDS (ACUTE AND CHRONIC):			
HEALTH EFFECTS (eye contact)	Can cause temporary irritation and blurred vision		
HEALTH EFFECTS (skin contact)	Not expected to be problematic		
HEALTH EFFECTS (ingestion)	Nausea with stomach aches		
HEALTH EFFECTS (inhalation)	Irritation to respiratory tract with dizziness, headaches and fatigue		
SECTION3-COMPOSITION			
HAZARDOUSCOMPONENTS:			
CHEMICAL NAME	CAS NO.	RECOMMENDED LIMITS	COMPOSITION RANGE
ETHYL ALCOHOL:	64-17-5	1000ppm (TWA)	<75%
GLYCEROL	56-81-5	0.05ppm (TLV)	<1.45%
HYDROGEN PEROXIDE	7722-84-1	No value established	<0.1%
EEC CLASSIFICATION: F XnXi		R Phrases: R10, R25/26/36/38/46	
SECTION4–FIRST AID MEASURES			
PRODUCT IN EYE:	Flush eye with water lifting upper and lower lids. Get medical attention.		
PRODUCT ON SKIN:	Flush with water and remove contaminated clothes. Seek medical advice.		
PRODUCT INGESTED:	Induce vomiting immediately. Give 2 glasses of water and seek medical attention.		
PRODUCT INHALED:	Remove to fresh air. Seek medical attention if breathing difficult.		
SECTION5–FIREFIGHTING MEASURES			
EXTINGUISHING MEDIA:	Water spray, dry chemical or alcohol foam.		
SPECIAL HAZARDS:	Above flash point, vapour-air mixtures are explosive.		
PROTECTIVE CLOTHING:	Full protective clothing with self-contained breathing apparatus.		

Midway Cash & Carry (Pty) Ltd - Reg # 2014/260391/07

SECTION6--ACCIDENTAL RELEASE MEASURES	
PERSONAL PRECAUTIONS:	Wear personal protective equipment as specified in section 8.
ENVIRONMENTAL PRECAUTIONS:	Do not flush to sewer or soil.
SMALL SPILLS:	Cover with inert absorbent material. Dispose in chemical waste containers. Rinse spill areas with fresh water.
LARGE SPILLS:	Contain and recover. Collect with inert material such as soil or sand. Dispose of in chemical waste containers. Rinse spill areas with fresh water.
SECTION7--HANDLING AND STORAGE	
SUITABLE MATERIAL:	Keep in original containers
HANDLING / STORAGE PRECAUTIONS:	Keep away from ignition sources and heat.
SECTION8--EXPOSURE CONTROL/PERSONAL PROTECTION	
OCCUPATION EXPOSURE LIMITS:	Ethanol – 1000ppm TWA, Glyecrol – 0.05ppm (TLV) Hydrogen peroxide – no value established
ENGINEERING CONTROL MEASURES:	A system of local or general exhaust is recommended.
PERSONAL PROTECTION: (respiratory)	If limit exceeded, full face-piece respirator.
PERSONAL PROTECTION: (hand)	Impervious protective gloves.
PERSONAL PROTECTION: (eye)	Face shield if splashing probable.
PERSONAL PROTECTION: (skin)	Boots, apron, overalls, as necessary to prevent skin contact.
SECTION9--PHYSICAL AND CHEMICAL PROPERTIES	
APPEARANCE:	Clear liquid
ODOUR:	Alcohol
pH (as is)	6.8 – 8.0
BOILING POINT:	Not known
MELTING POINT:	Not known
FLASH POINT:	16 - 23°C
FLAMMABILITY:	Yes



55 Chris Hani Rd
Protea South,
JHB,
1840
010 446 1905

AUTO IGNITION:	No
EXPLOSIVE LIMITS:	Not known
OXIDIZING PROPERTIES:	Not applicable
VAPOUR PRESSURE:	Not known
DENSITY:	0,88
SOLUBILITY: (water)	Yes
SOLUBILITY: (solvent)	No
SOLUBILITY: (coefficient)	Not known
SECTION10 – STABILITY AND REACTIVITY	
CONDITIONS TO AVOID:	Light, heat and incompatibilities
INCOMPATIBLE MATERIALS:	Strong oxidizers, perchlorates, alkali metals, hydrogen peroxide.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide and dioxide
SECTION11 – TOXICOLOGICAL INFORMATION	
ACUTE TOXICITY:	Oral rat LD50 > 5000mg/kg
SKIN AND EYE CONTACT:	Irritant
CHRONIC TOXICITY:	Not available
CARCINOGENIC:	Linked to liver cancer
MUTAGENIC:	Investigated
REPRODUCTIVE HAZARD:	Not known

SECTION12-ECOLOGICAL INFORMATION	
AQUATIC TOXICITY: (fish)	Toxic
AQUATIC TOXICITY: (daphnia)	Not known
AQUATIC TOXICITY: (algae)	Not known
BIODEGRADABLE:	Yes
BIO-ACCUMULATION:	No
MOBILITY:	Yes
GERMAN WGK:	Not known
SECTION13-DISPOSAL CONSIDERATIONS	
DISPOSAL CONSIDERATION:	Dilute and dispose at approved sites. Handle as hazardous waste.
DISPOSAL OF PACKING:	Do not rinse and recycle. Dispose of in approved land fill sites.
SECTION14-TRANSPORT INFORMATION	
ROAD/RAIL ADR/RID	
CLASS:	3 Flammable
PROPER SHIPPING NAME:	Flammable liquid, NOS
UN NUMBER:	1993
PACKAGING GROUP:	II
SEA (IMDG)	
CLASS:	3 Flammable
PROPER SHIPPING NAME:	Flammable liquid, NOS
UN NUMBER:	1993
PACKAGING GROUP:	II
AIR (IATA – DGR)	
CLASS:	3 Flammable
PROPER SHIPPING NAME:	Flammable liquid, NOS
UN NUMBER:	1993
PACKAGING GROUP:	II
TREM CARD NO:	Not available



55 Chris Hani Rd
Protea South,
JHB,
1840
010 446 1905

SECTION15-REGULATORY INFORMATION

EEC HAZARD CLASSIFICATION:	F Xn Xi
NATIONAL LEGISLATION:	Not applicable.
R PHRASES:	R10, R25/26/36/38/46
S PHRASES:	S25/26, S37/39/46

SECTION16-OTHER INFORMATION

DISCLAIMER: The submission of this MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health. The information contained herein has been compiled from sources considered by Hygiene Systems to be dependable and is accurate to the best of the company's knowledge. The information relates to the specific material designated herein, and does not relate to the use in combination with any other material or any other process. Hygiene Systems assumes no responsibility for injury to the recipient or third persons, for any damage to any property resulting from misuse of the controlled product.

Midway Cash & Carry (Pty) Ltd - Reg # 2014/260391/07

Certificate ZA19/210323

The management system of

Africa Vinegar

2 Atlas Road, Kempton Park, Northgate,
Gauteng, 1549, South Africa

has been assessed and certified as meeting the requirements of

ISO 22000:2018



For the following activities

Manufacturing of bulk naturally fermented vinegar and apple cider vinegar

Food Category - CIV - Processing of ambient stable products!

This certificate is valid from 19 September 2019 until 18 September 2022 and remains valid subject to satisfactory surveillance audits.

Re-certification audit due 60 days prior to expiry date
Issue 1. Certified since 19 September 2019

Authorised by



0005

SGS United Kingdom Ltd
Rossmore Business Park Ellesmere Port Cheshire CH65 3EN UK
t +44 (0)151 350-6666 f +44 (0)151 350-6600 www.sgs.com

HC SGS 22000 2018 0819

Page 1 of 1

