WaterGuard
Liquid blanket to save water

DOCUMENT REF	**WR575**
TITLE	**NSF Certification For Drinking Water**
AUTHOR	**NSF International**
DATE	**2012**
SYNOPSIS	NSF International is the world's leading certification authority for drinking water chemicals. NSF tested Aquatain (the former name of WaterGuard) for an extensive range of toxic substances, and none were detected. Accordingly, NSF certified Aquatain for use on drinking water storages in the USA. We have applied to NSF for the new name, WaterGuard, to be included on the certification documents.

NSF International

RECOGNIZES

Aquatain Products Pty Ltd.

Australia

AS COMPLYING WITH NSF/ANSI 60 AND ALL APPLICABLE REQUIREMENTS.
PRODUCTS APPEARING IN THE NSF OFFICIAL LISTING ARE
AUTHORIZED TO BEAR THE NSF MARK.

ANSI Accredited Program
PRODUCT CERTIFICATION
#0216

Certification Program
Accredited by the
American National
Standards Institute

Certification Program
Accredited by the
Standards Council
of Canada

August 21, 2012
Certificate# 4Q360 - 02

David Purkiss, General Manager
Water Distribution Systems

NSF International
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Live Safer™

TEST REPORT

Send To: 4Q360
Mr. Graham Strachan
Aquatain Products Pty Ltd.
9-13 Villas Road
Dandenong South
Victoria 3175
Australia

Facility: C0108360
Luxembourg Industries, Ltd.
Rakefet Street, Ramat
Hovav Industrial Zone, P.O. Box 2242
Beer Sheva 84874
Israel

Result	**PASS**	Report Date	29-JUL-2012

Customer Name	Aquatain Products Pty Ltd.
Tested To	NSF/ANSI 60
Description	250mL | Aquatain
Trade Designation	Aquatain
Test Type	Qualification
Job Number	J-00111663
Project Number	9128693 (CL01, TE01)
Project Manager	Soncea Braden-Mccann

This report documents the testing of the referenced product to the requirements of NSF/ANSI Standard 60 (Drinking Water Treatment Chemicals - Health Effects). This standard establishes minimum requirements for chemicals, the chemical contaminants, and impurities that are added to drinking water from drinking water treatment chemicals. Contaminants produced as by-products through reaction of the treatment chemical with a constituent of the drinking water are not covered by this Standard. Reference the "About the Standard" section at the end of this report for additional information about NSF/ANSI Standard 60 and the products covered under this Standard.

Thank you for having your product tested by NSF International.

Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Clifton J. McLellan

Clifton Mclellan - Director, Toxicology Services

Date 29-JUL-2012

General Information

Standard: NSF/ANSI 60

Chemical Name: Miscellaneous Water Supply Products
DCC Number: DA05426
Lot Number/Product Identifier: 120268001
Maximum Use Level: 0.2 mg/L
Physical Description of Sample: 250mL
Trade Designation/Model Number: Aquatain

Sample Id: **S-0000908422**
Description: 250mL | Aquatain
Sampled Date: 19-Jul-2012
Received Date: 17-Jul-2012

Tox Normalization Information:		**Lab Normalization Information:**	
Calculated NF	0.0167	Date exposure completed	19-JUL-2012
Preparation method used	A	Final volume of solution	1 L
MUL	0.2 mg/L	Mass of material used	12 mg
Compound Reference Key:	SPAC		

Normalization Calculation:

Normalized Result = Test Result (ug/L) * NF Where NF = MUL (mg/L) * $\frac{\text{Final Volume Of Solution (L)}}{\text{Mass of Material Used (mg)}}$

- *MUL = Maximum Use Level;*
- *Mass of Material Used = The mass of sample analyzed in the laboratory;*
- *Final Volume of Solution = The volume of water used to dilute the sample;*
- *An additional factor may be used to adjust the analytical result to field use conditions to account for product carryover, flushing, or other assumptions stipulated with the use of the product. If an additional factor is used, it is included in the information above.*

Testing Parameter	Units	Sample	Control	Result	Norm. Result	Acceptance Criteria(1)	Evaluation Status
Chemistry Lab							
Polynuclear Aromatic Hydrocarbons by GCMS							
Acenaphthene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Acenaphthylene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Anthracene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Benzo(a)Anthracene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Benzo(a)Pyrene (PAH)	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Benzo(b)Fluoranthene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Benzo(g,h,i)Perylene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Benzo(k)Fluoranthene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Chrysene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Dibenzo(a,h)Anthracene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Fluoranthene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Fluorene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Indeno(1,2,3,-c,d)Pyrene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Naphthalene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)	10	Pass
Phenanthrene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Pyrene	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)		
Arsenic	ug/L	ND(1)	ND(1)	ND(1)	ND(0.02)	1	Pass
Barium	ug/L	ND(1)	ND(1)	ND(1)	ND(0.02)	200	Pass

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Testing Parameter	Units	Sample	Control	Result	Norm. Result	Acceptance Criteria(1)	Evaluation Status
Chemistry Lab (Continued)							
Beryllium	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.4	Pass
Cadmium	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)	0.5	Pass
Chromium	ug/L	ND(1)	ND(1)	ND(1)	ND(0.02)	10	Pass
Copper	ug/L	ND(1)	ND(1)	ND(1)	ND(0.02)	130	Pass
Mercury	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)	0.2	Pass
Lead	ug/L	ND(1)	ND(1)	ND(1)	ND(0.02)	1.5	Pass
Antimony	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.6	Pass
Selenium	ug/L	ND(2)	ND(2)	ND(2)	ND(0.03)	5	Pass
Thallium	ug/L	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.003)	0.2	Pass
Volatile Organic Compounds (Ref: EPA 524.2)							
Dichlorodifluoromethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
Chloromethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.3	Pass
Vinyl Chloride	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.2	Pass
Bromomethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
Chloroethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.04	Pass
Trichlorofluoromethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	50	Pass
Trichlorotrifluoroethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.3	Pass
Methylene Chloride	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.5	Pass
1,1-Dichloroethylene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.7	Pass
trans-1,2-Dichloroethylene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	10	Pass
1,1-Dichloroethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
2,2-Dichloropropane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
cis-1,2-Dichloroethylene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	7	Pass
Chloroform	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	[TTHM]	
Bromochloromethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.3	Pass
1,1,1-Trichloroethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	20	Pass
1,1-Dichloropropene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
Carbon Tetrachloride	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.5	Pass
1,2-Dichloroethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.5	Pass
Trichloroethylene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.5	Pass
1,2-Dichloropropane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.5	Pass
Bromodichloromethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	[TTHM]	
Dibromomethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
cis-1,3-Dichloropropene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.2	Pass
trans-1,3-Dichloropropene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.2	Pass
1,1,2-Trichloroethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
1,3-Dichloropropane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
Tetrachloroethylene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.5	Pass

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Testing Parameter	Units	Sample	Control	Result	Norm. Result	Acceptance Criteria(1)	Evaluation Status
Chemistry Lab (Continued)							
Chlorodibromomethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	[TTHM]	
Chlorobenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	10	Pass
1,1,1,2-Tetrachloroethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	1	Pass
Bromoform	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	[TTHM]	
1,1,2,2-Tetrachloroethane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.2	Pass
1,2,3-Trichloropropane	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	5	Pass
1,3-Dichlorobenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	60	Pass
1,4-Dichlorobenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	7.5	Pass
1,2-Dichlorobenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	60	Pass
Carbon Disulfide	ug/L	ND(1)	ND(1)	ND(1)	ND(0.02)	70	Pass
Methyl-tert-Butyl Ether (MTBE)	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	10	Pass
tert-Butyl ethyl ether	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
Methyl Ethyl Ketone	ug/L	ND(5)	ND(5)	ND(5)	ND(0.08)	400	Pass
Methyl Isobutyl Ketone	ug/L	ND(5)	ND(5)	ND(5)	ND(0.08)	700	Pass
Toluene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	100	Pass
Ethyl Benzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	70	Pass
m+p-Xylenes	ug/L	ND(1)	ND(1)	ND(1)	ND(0.02)	[Xylenes]	
o-Xylene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	[Xylenes]	
Styrene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	10	Pass
Isopropylbenzene (Cumene)	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	400	Pass
n-Propylbenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.3	Pass
Bromobenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
2-Chlorotoluene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
4-Chlorotoluene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
1,3,5-Trimethylbenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.3	Pass
tert-Butylbenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	10	Pass
1,2,4-Trimethylbenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
sec-Butylbenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.3	Pass
p-Isopropyltoluene (Cymene)	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
1,2,3-Trimethylbenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.3	Pass
n-Butylbenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.3	Pass
1,2,4-Trichlorobenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
Hexachlorobutadiene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.1	Pass
1,2,3-Trichlorobenzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)		
Naphthalene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	10	Pass
Benzene	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	0.5	Pass
Total Trihalomethanes	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	8	Pass
Total Xylenes	ug/L	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.008)	1000	Pass

Sample Id: **S-0000908422**

Testing Parameter	Units	Sample	Control	Result	Norm. Result	Acceptance Criteria(1)	Evaluation Status

1 - If the acceptance criteria is blank and the evaluation status is "Fail", then the criteria used will be noted on the letter accompanying these results.

[Xylenes] - Acceptance based on Total Xylenes

[TTHM] - Acceptance based on Total Trihalomethanes

Common Terms and Acronyms Used:

Sample.....	Test result on the submitted product sample after prepared or exposed in accordance with the standard.
Control.....	Test result on a laboratory blank sample analyzed in parallel with the sample.
Result.....	Sample test result minus the Control test result.
Normalized Result...	Result normalized in accordance with the test standard to reflect potential at-the-tap concentrations
ND().....	Result is below the detection level of the analytical procedure as identified in the parenthesis.
DCC Number.....	NSF document control code of the registered formulation of the product tested
ug/L.....	Microgram per liter = 0.001 milligram per liter (mg/L)
SPAC.....	Acceptance criteria of the standard (Single Product Allowable Concentration)

References to Testing Procedures:

NSF Reference	Parameter / Test Description
C0314	Polynuclear Aromatic Hydrocarbons by GCMS
C3035	Total Arsenic in Drinking Water by ICPMS (Ref: EPA 200.8)
C3038	Barium in Drinking Water by ICPMS (Ref: EPA 200.8)
C3041	Beryllium in Drinking Water by ICPMS (Ref: EPA 200.8)
C3046	Cadmium in Drinking Water by ICPMS (Ref: EPA 200.8)
C3052	Chromium in Drinking Water by ICPMS (Ref: EPA 200.8)
C3058	Copper in Drinking Water by ICPMS (Ref: EPA 200.8)
C3071	Mercury in Drinking Water by ICPMS (Ref: EPA 200.8)
C3100	Lead in Drinking Water by ICPMS (Ref: EPA 200.8)
C3113	Antimony in Drinking Water by ICPMS (Ref: EPA 200.8)
C3115	Selenium in Drinking Water by ICPMS (Ref: EPA 200.8)
C3127	Thallium in Drinking Water by ICPMS (Ref: EPA 200.8)
C4662	Volatile Organic Compounds (Ref: EPA 524.2)

Test descriptions preceded by an asterisk "*" indicate that testing has been performed per NSF International requirements but is not within its scope of accreditation.

Testing Laboratories:

	Id	Address
All work performed at: →	NSF_AA	NSF International 789 N. Dixboro Road Ann Arbor MI 48105

About the Standard:

NSF/ANSI Standard 60: Drinking Water Treatment Chemicals - Health Effects

NSF/ANSI 60 establishes minimum health effects requirements for the chemicals, the chemical contaminants, and the impurities that are directly added to drinking water from drinking water treatment chemicals. It does not establish performance or taste and odor requirements. The standard contains requirements for chemicals that are directly added to water and are intended to be present in the finished water as well as other chemical products that are added to water but are not intended to be present in the finished water. Chemicals covered by this Standard include, but are not limited to, coagulation and flocculation chemicals, softening, precipitation, sequestering, pH adjustment, and corrosion/scale control chemicals, disinfection and oxidation chemicals, miscellaneous treatment chemicals, and miscellaneous water supply chemicals.

The testing performed to this standard is done to estimate the level of contaminants or impurities added to drinking water when the chemical is used at the "Maximum Use Level" under attestment. Prior to testing, information is obtained on the formulation and sources of supply used to manufacture the chemical. This information is then reviewed along with the minimum requirements of the standard to establish the potential contaminants of concern. A representative sample of chemical is obtained for testing. The chemical sample is prepared for analysis through specific methods established in the standard based on the type of chemical and then is analyzed for potential contaminants determined during the formulation review. The laboratory results are normalized to represent potential at-the-tap values and then compared to the "single product allowable concentration" (SPAC) established by the standard. The product is found in compliance with the standard if the normalized value is less than or equal to the allowable concentration.