



Water Quality Association  
4151 Naperville Road  
Lisle, IL 60532-3696 USA  
Phone: 630 505 0160  
Fax: 630 505 9637  
www.wqa.org  
A not-for-profit organization

August 10, 2012

Sun Peng  
DongGuan Diercon Technology Co., Ltd.  
No. 16, Zhenlong Road, Wushu District, Changan Town  
DongGuan City, Guangdong Province, China

Dear Sun Peng,

For your records, WQA is sending you the test report for the Materials Extraction NSF/ANSI Standard 42-2010, Section 4 Testing conducted on the PBO1 with one 03.04.05.11(o-ring) and one 03.04.05.12(o-ring).

We appreciate your business and look forward to working with you on future testing and certification projects. Should you have any questions or need additional information, please feel free to contact Tana Brady at (630) 505-0160 x 507 or tbrady@wqa.org.

Sincerely,

**Water Quality Association**

A handwritten signature in blue ink that reads "Tana Brady".

Enclosures.



Water Quality Association  
International Headquarters  
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## DongGuan Diercon Technology Co., Ltd Test Report

**Report Number:** REP.6521.1202L.081012.01  
**Certification Project #:** 6521.1101C  
**Testing Laboratory:** Water Quality Association Laboratory  
4151 Naperville Road  
Lisle, IL 60532  
**Client:** DongGuan Diercon Technology Co., Ltd  
No. 16, Zhenlong Road, Wushu District, Changan  
Town  
DongGuan City, Guangdong Province, China  
**Test Unit #:** 6521.1202L.01-.04  
**Model:** PBO1 with one 03.04.05.11(o-ring) and one 03.04.05.12(o-ring)  
**Test Completion Date:** August 6, 2012  
**Test Method:** Materials Extraction NSF/ANSI Standard 42-2010, Section 4

**Test Results:** Complete, pending toxicological review

**Comments:** Testing was conducted according to NSF/ANSI Standard 42 with no deviations. Please note that one Unknown Compound was found to be present within the EPA method 524.2 and three Unknown Compounds were found in the 625 scan. One Unknown Compound in the 625 scan is marked with an asterisk and requires additional review by WQA's toxicologist to determine compliance with the Standard. All other Unknown Compounds have been reviewed by WQA's Toxicologist who has deemed them to be in compliance with the Standard. All other extractants met the criteria of the Standard. Please see the enclosed Water Quality Association Laboratory Analysis Report for a review of the data.

**Testing Conducted By:** Bibha Dajjal, CWS-VI, CI, Laboratory Analyst Level II

**Report Approved By:** Tana Brady 8/10/12  
Tana Brady, CWS-VI, CI Product Testing Laboratory Supervisor Date

This report may not be reproduced, except in whole, without the written approval of WQA. The test results relate only to the specific items tested and do not indicate the product is certified by WQA or can display the Gold Seal Mark.



Water Quality Association Analysis Report

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 International Headquarters  
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Date: 08/10/12  
 Company: DongGuan Diercon Technology Co., Ltd  
 Contact: Sun Peng  
 Model: PBO1 with one 03.04.05.11(o-ring) and one 03.04.05.12(o-ring)  
 Test Unit: 6521.1202L.01-.04  
 Testing Completed: 08/06/12

Materials Extraction NSF/ANSI Standard 42-2010, Section 4

Analysis	Corrected Sample Results (ug/L) <sup>1</sup>	CAS Registry Number	DWTU Allowable Level (ug/L)
<b>(EPA 524.2 Method)</b>			
1,1,1,2-Tetrachloroethane	< 0.50	630-20-6	10
1,1,1-Trichloroethane	< 0.50	71-55-6	200, 5 <sup>AC</sup>
1,1,2,2-Tetrachloroethane	< 0.50	79-34-5	2
1,1,2-Trichloro-1,2,2-trifluoroethane	< 0.50	76-13-1	N/A
1,1,2-Trichloroethane	< 0.50	79-00-5	5 <sup>AC</sup>
1,1-Dichloroethane	< 0.50	75-34-3	5
1,1-Dichloroethene	< 0.50	75-35-4	7
1,1-Dichloropropene	< 0.50	563-58-6	3
1,2,3-Trichlorobenzene	< 0.50	87-61-6	3
1,2,3-Trichloropropane	< 0.50	96-18-4	40
1,2,3-Trimethylbenzene	< 0.50	526-73-8	10
1,2,4-Trichlorobenzene	< 0.50	120-82-1	70
1,2,4-Trimethylbenzene	< 0.50	95-63-6	10
1,2-Dibromo-3-chloropropane	< 0.20	96-12-8	0.2
1,2-Dibromoethane	< 0.20	106-93-4	0.2
1,2-Dichlorobenzene	< 0.50	95-50-1	600
1,2-Dichloroethane	< 0.50	107-06-2	5, Detected <sup>AC</sup>
1,2-Dichloropropane	< 0.50	78-87-5	5
1,3,5-Trimethylbenzene	< 0.50	108-67-8	10
1,3-Butadiene	< 0.05	106-99-0	0.2
1,3-Dichlorobenzene	< 0.50	541-73-1	600
1,3-Dichloropropane	< 0.50	142-28-9	N/A
1,4-Dichlorobenzene	< 0.50	106-46-7	75
1-Chlorobutane	< 5.0	109-69-3	N/A
2,2-Dichloropropane	< 0.50	594-20-7	N/A
2-Butanone (MEK)	< 5.0	78-93-3	4000
2-Chloro-1,3-butadiene	< 5.0	126-99-8	N/A
2-Chlorotoluene	< 0.50	95-49-8	100
2-ethyl-1-hexanol	< 5.0	104-76-7	50
2-Hexanone	< 5.0	591-78-6	N/A
2-Methyl-1,3-butadiene	< 5.0	78-79-5	N/A
4-Chlorotoluene	< 0.50	106-43-4	3
4-Isopropyltoluene	< 0.50	99-87-6	3
4-Methyl-2-pentanone	< 2.0	108-10-1	7000
Acetone	< 5.0	67-59-1	6000, 100 <sup>AC</sup>
Acrylonitrile	< 0.05	107-13-1	6, 5 <sup>AC</sup>
Allyl chloride	< 5.0	107-05-1	170
Benzene	< 0.50	71-43-2	5, Detected <sup>AC</sup>
bis(2-Chloroethyl)ether	< 5.0	111-44-4	0.3
Bromobenzene	< 0.50	108-86-1	3
Bromochloromethane	< 0.50	74-97-5	90
Bromodichloromethane	< 0.50	75-27-4	80 <sup>TTM total</sup> , 5 <sup>AC</sup>
Bromoform	< 0.50	75-25-2	80 <sup>TTM total</sup> , 5 <sup>AC</sup>



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Water Quality Association  
 International Headquarters  
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Date: 8/10/12  
 Company: DongGuan Diercon Technology Co., Ltd  
 Contact: Sun Peng  
 Model: PBO1 with one 03.04.05.11(o-ring) and  
 one 03.04.05.12(o-ring)  
 Test Unit: 6521.1202L01-.04  
 Testing Completed: 8/6/12

Analysis	Corrected Sample Results (ug/L)	CAS Registry Number	DWTU Allowable Level (ug/L)
<b>(EPA 524.2 Method Continued)</b>			
Bromomethane	< 0.50	74-83-9	10
Carbon disulfide	< 5.0	75-15-0	700
Carbon tetrachloride	< 0.50	56-23-5	5, Detected <sup>AC</sup>
Chloroacetonitrile	< 5.0	107-14-2	N/A
Chlorobenzene	< 0.50	108-90-7	100
Chloroethane	< 0.50	75-00-3	N/A
Chloroform	< 0.50	67-66-3	80 <sup>TTHM total</sup> , 5 <sup>AC</sup>
Chloromethane	< 0.50	74-87-3	30
cis-1,2-Dichloroethene	< 0.50	156-59-2	3
cis-1,3-Dichloropropene	< 0.50	10061-01-5	4
Cyclohexanone	< 5.0	108-94-1	30000, 5 <sup>AC</sup>
Dibromochloromethane	< 0.50	124-48-1	80 <sup>TTHM total</sup> , 5 <sup>AC</sup>
Dibromomethane	< 0.50	74-95-3	N/A
Dichlorodifluoromethane	< 0.50	75-71-8	3
Diethyl ether	< 2.0	60-29-7	N/A
Ethyl acrylate	< 1.0	140-88-5	10
Ethyl methacrylate	< 1.0	97-63-2	10
Ethylbenzene	< 0.50	100-41-4	700, 5 <sup>AC</sup>
Hexachlorobutadiene	< 0.50	87-68-3	1.4
Hexachloroethane	< 2.0	67-72-1	7
Iodomethane	< 2.0	74-88-4	3
Isopropylbenzene	< 0.50	98-82-8	700
m-Xylene	< 0.50	108-38-3	10000 <sup>XT</sup> , 5 <sup>AC</sup>
p-Xylene	< 0.50	106-42-3	10000 <sup>XT</sup> , 5 <sup>AC</sup>
Methacrylonitrile	< 5.0	126-98-7	10
Methyl acrylate	< 1.0	96-33-3	3
Methyl methacrylate	< 1.0	80-62-6	10000
Methyl tert-butyl ether	< 0.50	1634-04-4	2
Methylene chloride(Dichloromethane)	< 0.50	75-09-2	5, Detected <sup>AC</sup>
n-Butyl acrylate	< 1.0	141-32-2	10
n-Butylbenzene	< 0.50	104-51-8	3
n-Propylbenzene	< 0.50	103-65-1	N/A
Naphthalene	< 0.50	91-20-3	100, 1 <sup>AC</sup>
o-Xylene	< 0.50	95-47-6	10000 <sup>XT</sup> , 5 <sup>AC</sup>
Pentachloroethane	< 2.0	76-01-7	N/A
sec-Butylbenzene	< 0.50	135-98-8	3
Styrene	< 0.50	100-42-5	100, 5 <sup>AC</sup>
tert-Butylbenzene	< 0.50	98-06-6	N/A
Tetrachloroethene	< 0.50	127-18-4	5, Detected <sup>AC</sup>
Tetrahydrofuran	< 5.0	109-99-9	1000, 100 <sup>AC</sup>
Toluene	< 0.50	108-88-3	1000, 5 <sup>AC</sup>
trans-1,2-Dichloroethene	< 0.50	156-59-2	3
trans-1,3-DiChloropropene	< 0.50	542-75-6	4
trans-1,4-DiChloro-2-butene	< 5.0	110-57-6	N/A



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Date: 8/10/12  
 Company: DongGuan Diercon Technology Co., Ltd  
 Contact: Sun Peng  
 Model: PBO1 with one 03.04.05.11(o-ring) and  
 one 03.04.05.12(o-ring)  
 Test Unit: 6521.1202L.01-.04  
 Testing Completed: 8/6/12

Analysis	Corrected Sample Results (ug/L) <sup>1</sup>	CAS Registry Number	DWTU Allowable Level (ug/L)
<b>(EPA 524.2 Method Continued)</b>			
Trichloroethene	< 0.50	79-01-6	5
Trichlorofluoromethane	< 0.50	75-69-4	2000
Vinyl chloride	< 0.20	75-01-4	2, Detected <sup>AC</sup>

Retention Time (min)	EPA (524.2) VOC Scan Tentatively Identified Compounds (TICs)	Corrected Sample Results (ug/L) <sup>1</sup>	CAS Registry Number	DWTU Allowable Level (ug/L)
9.84	Cyclotrisiloxane, Hexamethyl	1.1	541-05-9	3
14.01	Unknown oxygenated, contains silicon compound	1.0	MW>249	Cleared by Toxicologist

Analysis	Corrected Sample Results (ug/L) <sup>1</sup>	CAS Registry Number	DWTU Allowable Level (ug/L)
<b>(Polynuclear Aromatic (PNA) Compounds - EPA 625 Method)</b>			
Acenaphthene	< 0.400	83-32-9	1 <sup>AC</sup>
Acenaphthylene	< 0.400	208-96-8	3, 2 <sup>AC</sup>
Anthracene	< 0.200	120-12-7	3, Detected <sup>AC</sup>
Benzo(a)anthracene	< 0.400	56-55-3	Detected <sup>AC</sup>
Benzo(a)pyrene	< 0.200	50-32-8	0.2
Benzo(b)fluoranthene	< 0.200	205-99-2	Detected <sup>AC</sup>
Benzo(g,h,i)perylene	< 0.600	191-24-2	Detected <sup>AC</sup>
Benzo(k)fluoranthene	< 0.200	207-08-9	N/A
Chrysene	< 0.300	218-01-9	3, Detected <sup>AC</sup>
Dibenzo(a,h)anthracene	< 0.400	53-70-3	120
Fluoranthene	< 0.200	206-44-0	Detected <sup>AC</sup>
Fluorene	< 0.400	86-73-7	Detected <sup>AC</sup>
2-Methylnaphthalene	< 0.400	91-57-6	30
Naphthalene	< 0.500	91-20-3	100, 1 <sup>AC</sup>
Phenanthrene	< 0.200	85-01-8	3, Detected <sup>AC</sup>
Pyrene	< 0.600	129-00-0	3, Detected <sup>AC</sup>
Indeno(1,2,3-cd)pyrene	< 0.200	193-39-5	Detected <sup>AC</sup>

Analysis	Corrected Sample Results (ug/L) <sup>1</sup>	CAS Registry Number	DWTU Allowable Level (ug/L)
<b>(Non-Aromatic Compounds - EPA 625 Method)</b>			
2,4,6-Trichlorophenol	< 1.00	88-06-2	5
2,4-Dichlorophenol	< 1.00	120-83-2	3
2,4-Dimethylphenol	< 2.00	105-67-9	100
2,4-Dinitrophenol	< 1.00	51-28-5	N/A
2,6-Di-tert-butyl-4-methoxyphenol	< 5.00	489-01-0	3
2-Chlorophenol	< 1.00	95-57-8	N/A
2-Nitrophenol	< 1.00	88-75-5	N/A
2-Phenyl-2-propanol	< 0.600	617-94-7	50



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 Company: DongGuan Diercon Technology Co., Ltd  
 Contact: Sun Peng  
 Model: PBO1 with one 03.04.05.11(o-ring) and one 03.04.05.12(o-ring)  
 Test Unit: 6521.1202L.01-.04  
 Testing Completed: 8/6/12

Analysis	Corrected Sample Results (ug/L) <sup>1</sup>	CAS Registry Number	DWTU Allowable Level (ug/L)
<b>(Non-Aromatic Compounds - EPA 625 Method Continued)</b>			
3,3-Dichlorobenzidine	< 1.00	91-94-1	0.8
4,6-Dinitro-2-methylphenol	< 1.00	534-52-1	N/A
4-Chloro-3-methylphenol	< 1.00	59-50-7	700
4-Nitrophenol	< 1.00	100-02-7	N/A
4-tert-Butylphenol	< 2.00	98-54-4	N/A
Acetophenone	< 0.500	98-86-2	200

Analysis	Corrected Sample Results (ug/L) <sup>1</sup>	CAS Registry Number	DWTU Allowable Level (ug/L)
<b>(EPA 625 Method, Continued)</b>			
Benzothiazole	< 1.00	95-16-9	40
Bis(2-ethylhexyl)adipate	< 0.500	103-23-1	400
Bis(2-ethylhexyl)phthalate	< 1.00	117-81-7	6
Butyl benzyl phthalate	< 1.00	85-68-7	1000, 10 <sup>AC</sup>
Di-n-butyl phthalate	< 2.00	84-74-2	700, 10 <sup>AC</sup>
Di-n-octyl phthalate	< 1.10	117-84-0	10 <sup>AC</sup>
Diethyl phthalate	< 1.00	84-66-2	6000, 10 <sup>AC</sup>
Dimethyl phthalate	< 1.00	131-11-3	10
Isophorone	< 0.500	78-59-1	400
m-Cresol	< 1.00	108-39-4	N/A
p-Cresol	< 1.00	106-44-5	3
N-Nitroso-di-n-butylamine	< 0.700	924-16-3	0.06
N-Nitrosodi-n-propylamine	< 1.00	621-64-7	0.05
N-Nitrosodiphenylamine	< 0.300	86-30-6	70
o-Cresol	< 1.00	95-48-7	350
Pentachlorophenol	< 0.500	87-86-5	1
Phenol	< 0.500	108-95-2	2000, 50 <sup>AC</sup>
Phenyl sulfone	< 0.200	127-63-9	N/A

Retention Time (min)	EPA 625 (BNAs) Scan Tentatively identified Compounds (TICs)	Corrected Sample Results (ug/L) <sup>1</sup>	CAS Registry Number	DWTU Allowable Level (ug/L)
19.57	13-Docosamide, (Z)	2.8	112-84-5	200
8.138	Nonanoic acid	2.7	112-05-0	10
14.93	Unknown aromatic, oxygenated compound*	1.3	MW>223	Needs further review
18.75	Unknown non-aromatic, oxygenated compound	4.6	MW>198	Did not review
16.49	Unknown oxygenated, nitrogenous compound	3.1	MW>199	Did not review



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**Date:** 8/10/12  
**Company:** DongGuan Diercon Technology Co., Ltd  
**Contact:** Sun Peng  
**Model:** PBO1 with one 03.04.05.11(o-ring) and one 03.04.05.12(o-ring)  
**Test Unit:** 6521.1202L.01-.04  
**Testing Completed:** 8/6/12

Analysis	Corrected Sample Results (ug/L) <sup>1</sup>	CAS Registry Number	DWTU Allowable Level (ug/L)
<b>(EPA 200.8 Method)</b>			
Antimony	< 0.2	7440-36-0	6
Aluminum	< 0.5	7429-90-5	500, 200 <sup>AC</sup>
Arsenic	< 0.5	7440-38-2	10
Barium	< 0.2	7440-39-3	2000, 50 <sup>AC</sup>
Beryllium	< 0.2	7440-41-7	4, Detected <sup>AC</sup>
Cadmium	< 0.2	7440-43-9	5, Detected <sup>AC</sup>
<b>Chromium</b>	0.9	7440-47-3	100
Copper	< 0.5	7440-50-8	1300, 50 <sup>AC</sup>
Lead	< 0.1	7439-92-1	10, 5 <sup>AC,3</sup>
Mercury	< 0.2	7439-97-6	2, Detected <sup>AC</sup>
Selenium	< 1	7782-49-2	50
Thallium	< 0.2	7440-28-0	2, Detected <sup>AC</sup>
Cobalt	< 0.2	7440-32-6	3
Silver	< 5.0	7440-22-4	100

Analysis	Corrected Sample Results (pCi/L) <sup>1</sup>	CAS Registry Number	DWTU Allowable Level (pCi/L)
<b>(Radionuclides - EPA Method 7110 B)</b>			
Gross Alpha	ND	12587-46-1	15 pCi/L
Gross Beta	0.516	12587-47-2	50 pCi/L
Potassium 40	0.08036	7440-09-7	N/A

**Flushing / Conditioning Procedure Used:** Squeezed water through product until the water is clear.

**Holding Volume Used:** 630 ml

**Exposure Sequence:** 3- 24 hrs

**Product Compliance to Requirements of Standard:** Complete, pending toxicological review

<sup>1</sup> Corrected Sample Results are corrected for process blank concentration.

<sup>2</sup> Gross Beta Results are corrected by subtracting the concentration of the Process Blank and Potassium-40 in pCi/L.



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**Date:** 8/10/12  
**Company:** DongGuan Diercon Technology Co., Ltd  
**Contact:** Sun Peng  
**Model:** PBO1 with one 03.04.05.11(o-ring) and one 03.04.05.12(o-ring)  
**Test Unit:** 6521.1202L.01-.04  
**Testing Completed:** 8/6/12

**WQA Analytical Laboratory, Pace Analytical Services, Inc., Suburban Laboratories, Inc.**

Analytical Testing was Conducted by the Following Laboratory(ies):

Non-target analytes specifically required by the preliminary toxicological review will be listed under Tentatively Identified Compounds (TICs). If a non-target analyte was to be searched for and not found, then it shall be reported as "Not Detected".

Non-target analytes not specifically required by the preliminary toxicological review will show as Tentatively Identified Compounds (TICs) if found to be present within their respective scans. If a non-target analyte is not listed as a TIC, then it is not present at reportable levels for this testing.

This report has been reviewed for technical accuracy and completeness. The analyses were performed using EPA or other approved methodologies and the results were reported on an "as received" basis unless otherwise noted. These results relate only to the items tested. Sample analyses conducted for this laboratory report were performed by WQA or by a WQA recognized testing laboratory.

### Definitions

**DWTU Allowable Level** = Allowable level according to Standards for evaluation of Drinking Water Treatment Units; NSF/ANSI 42/53, 55, 58, 62

**AC** = Advisory Concentration; the level at which WQA is required to inform the client, though exceedence of this level does not in itself constitute a failure.

**Detected** = An Advisory Concentration that any amount of contaminant must be declared to the manufacturer, but does not in itself constitute a failure of the product.

**N/A** = An Allowable Level has not yet been determined for this compound.

**\*** = An Allowable Level has not yet been determined for this compound or current Allowable Level was exceeded, and since it was detected it requires additional review by WQA's Toxicologist to determine compliance to the Standard.

**XT** = Xylenes Total; total of o-xylene, m-xylene and p-xylene.

**TTHM Total** = Tertiary Trihalomethanes Total: total concentration of the following compounds; bromodichloromethane, bromoform, chlorodibromomethane, chloroform.

**CAS Registry Number** = Chemical Abstracts Service Registry Number; an unique, universal number assigned to individual compounds.

**Cleared By Toxicologist** = This unknown compound was detected, and was reviewed by WQA's Toxicology Manager and has been deemed to be compliant to the relevant Standard(s).

**Entered by:** Bibha Dahal, CWS-VI, CI, Laboratory Analyst II **Date:** 08/07/12

**Data and Calculations Verified by:** Tana Brady, CWS-VI, CI, Product Testing Laboratory Supervisor **Date:** 8/8/12

**Final Approval by:** Tana Brady, CWS-VI, CI, Product Testing Laboratory Supervisor **Date:** 8/10/12



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