

**Results of Proficiency Test
Phthalates in Polymers
May 2016**

Organised by: Institute for Interlaboratory Studies
Spijkenisse, the Netherlands

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Report: iis16P04

July 2016

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1 INTRODUCTION

Phthalates act as softeners and are commonly used as plasticizers in PVC. Phthalates may migrate fairly easily from PVC into the environment. Because phthalates appeared to have negative effects on health and the environment, regulations have been set up.

The manufacture and import of toys into the EC is regulated by the European Union's Toy Directive 88/378, with in addition the general product safety, which is covered by EU directive 2001/95 and Council Directive + amendments 76/769/EEC. These regulations govern conditions related to toys intended for children under 36 months of age (this group often suck or chew on toys and phthalates migrate easily). Therefore plastic toys are not allowed to contain either more than 0.1 %M/M of DEHP, DBP and BBP combined or more than 0.1%M/M of DINP (3 mixtures, ref. 21), DIDP (2 mixtures, ref 22) and DNOP combined.

The determination of phthalates in plastics is known to give problems with the comparability of laboratory results. The fact that phthalates, used in the plastic industry are not pure components, but complex (and overlapping) mixtures is one of the causes for these problems.

However, no appropriate Plastic reference materials are yet available (ref. 20).

As an alternative, participation in a proficiency test may enable laboratories to check their performance. Therefore, a proficiency test (laboratory-evaluating interlaboratory study) for the determination of phthalates in plastics was again organized by the Institute for Interlaboratory Studies in May 2016.

In this interlaboratory study iis16P03, 171 laboratories in 38 different countries did participate. See appendix 3 for the number of participating laboratories per country.

In this report the results of the proficiency test are presented and discussed. This report is also electronically available through the iis website www.iisnl.com.

2 SET UP

The Institute for Interlaboratory Studies (iis) in Spijkenisse, the Netherlands was the organiser of this proficiency test (PT). Sample analyses for fit-for-use and homogeneity testing were subcontracted to an ISO/IEC 17025 accredited laboratory. It was decided to send two different plastic samples. Both batches were PVC granulates, especially prepared by a Chinese factory by addition of technical mixtures of phthalates to PVC and subsequent homogenization. The participants were requested to report rounded and unrounded test results. The unrounded test results were preferably used for statistical evaluation.

2.1 ACCREDITATION

The Institute for Interlaboratory Studies in Spijkenisse, the Netherlands, is accredited in agreement with ISO/IEC 17043:2010 (R007), since January 2000, by the Dutch Accreditation Council (Raad voor Accreditatie). This PT falls under the accredited scope. This ensures strict adherence to protocols for sample preparation and statistical evaluation and 100% confidentiality of participant's data. Feedback from the participants on the reported data is encouraged and customer's satisfaction is measured on regular basis by sending out questionnaires.

2.2 PROTOCOL

The protocol followed in the organisation of this proficiency test was the one as described for proficiency testing in the report 'iis Interlaboratory Studies: Protocol for the Organisation, Statistics and Evaluation' of April 2014 (iis-protocol, version 3.3). This protocol can be downloaded via the FAQ page of the iis website <http://www.iisnl.com>.

2.3 CONFIDENTIALITY STATEMENT

All data presented in this report must be regarded as confidential and for use by the participating companies only. Disclosure of the information in this report is only allowed by means of the entire report. Use of the contents of this report for third parties is only allowed by written permission of the Institute for Interlaboratory Studies. Disclosure of the identity of one or more of the participating companies will be done only after receipt of a written agreement of the companies involved.

2.4 SAMPLES

Two samples were prepared from two different bulk materials.

The first sample was a pink coloured PVC, to which small, known amounts of DNOP, DBP, DEHP and DMP were added, as well as DOTP (Diethylterphthalate) as not banned plasticizer. The batch of PVC was granulated after thoroughly mixing and extrusion. From this batch, 200 plastic bags with 3 grams of granulate sample each were prepared and labelled #16560. The homogeneity of the subsamples #16560 was checked by determination of all added phthalates on 8 stratified randomly selected subsamples.

	DMP in %M/M	DBP in %M/M	DNOP in %M/M	DEHP in %M/M
Sample #16560-1	0.0778	0.3127	0.1557	0.1327
Sample #16560-2	0.0779	0.3077	0.1620	0.1329
Sample #16560-3	0.0784	0.3165	0.1650	0.1320
Sample #16560-4	0.0743	0.2998	0.1520	0.1289
Sample #16560-5	0.0756	0.3231	0.1620	0.1422
Sample #16560-6	0.0742	0.3117	0.1578	0.1380
Sample #16560-7	0.0786	0.3098	0.1596	0.1396
Sample #16560-8	0.0755	0.3156	0.1588	0.1365

Table 1: homogeneity test results of the subsamples #16560

From the above test results the repeatabilities were calculated and compared with 0.3 times the estimated reproducibilities calculated from the variation coefficients of the target method ISO14389:14, appendix D, table 5 and method 4 and in agreement with the procedure of ISO 13528, Annex B2 in the next table;

	DMP in %M/M	DBP in %M/M	DNOP in %M/M	DEHP in %M/M
r (observed) #16560	0.0051	0.0192	0.0114	0.0125
ref. test method	ISO14389:14	ISO14389:14	ISO14389:14	ISO14389:14
0.3*R (ref. method)	0.0072	0.0295	0.0150	0.0128

Table 2: evaluation of repeatabilities of phthalate contents of the subsamples #16560

The second sample was a blue coloured PVC, to which small, known amounts of BBP, DINP and DEHP were added. The batch of PVC was granulated after thoroughly mixing and extrusion. From this batch, 200 plastic bags of 3 gram of granulated sample each were prepared and labelled #16561. The homogeneity of the subsamples #16561 was checked by determination of all added phthalates on 7 stratified randomly selected subsamples.

	BBP in %M/M	DINP in %M/M	DEHP in %M/M
Sample #16561-1	0.204	0.354	0.477
Sample #16561-2	0.202	0.337	0.488
Sample #16561-3	0.203	0.361	0.487
Sample #16561-4	0.209	0.367	0.500
Sample #16561-5	0.212	0.371	0.515
Sample #16561-6	0.206	0.374	0.492
Sample #16561-7	0.204	0.355	0.489

Table 3: homogeneity test results of the subsamples #16561

From the above test results the repeatabilities were calculated and compared with 0.3 times the estimated reproducibilities calculated from the variation coefficients of the target method ISO14389:14, appendix D, table 5 and method 4 and in agreement with the procedure of ISO 13528, Annex B2 in the next table;

	BBP in %M/M	DINP in %M/M	DEHP in %M/M
r (observed) #16561	0.010	0.035	0.034
ref. test method	ISO14389:14	ISO14389:14	ISO14389:14
0.3*R (ref. method)	0.019	0.034	0.047

Table 4: evaluation of repeatabilities of phthalate contents of the subsamples #16561

The calculated repeatabilities were all in agreement with the respective target precision data. Therefore, the homogeneity of subsamples #16560 and #16561 was assumed.

To each of the participating laboratories, one sample of approx. 3 grams granulate, labelled #16560 and one sample of approx. 3 grams granulate, labelled #16561 were sent on April 20, 2016.

2.5 ANALYSIS

The participants were requested to determine on both samples #16560 and #16561, fourteen individual phthalates and other phthalates (when identified).

It was explicitly requested to treat the samples as if they were routine samples and to report the test results using the indicated units on the report form and not to round the test results, but report as much significant figures as possible. It was also requested not to report 'less than' results which are above the detection limit, because such results can not be used for meaningful statistical calculations. To get comparable results a detailed report form, on which the units were prescribed as well as the reference test methods and a letter of instructions were prepared and made available on the data entry portal www.kpmd.co.uk/sqs-iis-cts/. A form to confirm receipt of the samples and a letter of instructions were added to the sample package.

3 RESULTS

During five weeks after sample despatch, the results of the individual laboratories were gathered via the data entry portal www.kpmd.co.uk/sgs-iis-cts/. The reported test results are tabulated per determination in appendix 1 of this report. The laboratories are presented by their code numbers.

Directly after the deadline, a reminder was sent to those laboratories that had not reported test results at that moment. Shortly after the deadline, the available test results were screened for suspect data. A test result was called suspect in case the Huber Elimination Rule (a robust outlier test) found it to be an outlier. The laboratories that produced these suspect data were asked to check the reported test results. Additional or corrected test results are used for data analysis and original test results are placed under 'Remarks' in the result tables in appendix 1.

3.1 STATISTICS

The protocol followed in the organisation of this proficiency test was the one as described for proficiency testing in the report 'iis Interlaboratory Studies: Protocol for the Organisation, Statistics and Evaluation' of April 2014 (iis-protocol, version 3.3).

For the statistical evaluation the *unrounded* (when available) figures were used instead of the rounded test results. Test results reported as '<...' or '>...' were not used in the statistical evaluation.

First, the normality of the distribution of the various data sets per determination was checked by means of the Lilliefors-test a variant of the Kolmogorov-Smirnov test and by the calculation of skewness and kurtosis. Evaluation of the three normality indicators in combination with the visual evaluation of the graphic Kernel density plot, lead to judgement of the normality being either 'unknown', 'OK', 'suspect' or 'not OK'. After removal of outliers, this check was repeated. Not all data sets proved to have a normal distribution, in which cases the statistical evaluation of the results should be used with due care.

According to ISO 5725 the original test results per determination were submitted subsequently to Dixon's, Grubbs' and Rosner outlier tests. Outliers are marked by D(0.01) for the Dixon's test, by G(0.01) or DG(0.01) for the Grubbs' test and by R(0.01) for the Rosner General ESD test. Stragglers are marked by D(0.05) for the Dixon's test, by G(0.05) or DG(0.05) for the Grubbs' test and by R(0.05) for the Rosner General ESD test (ref. 27). Both outliers and stragglers were not included in the calculations of averages and standard deviations.

For each assigned value the uncertainty was determined in accordance with ISO13528. Subsequently the calculated uncertainty was evaluated against the respective requirement based on the target reproducibility in accordance with ISO13528. When the uncertainty passed the evaluation no remarks are made in the report. However, when the uncertainty failed the evaluation it is mentioned in the report and it will have consequences for the evaluation of the test results.

Finally, the reproducibilities were calculated from the standard deviations by multiplying them with a factor of 2.8.

3.2 GRAPHICS

In order to visualise the data against the reproducibilities from literature, Gauss plots were made, using the sorted data for one determination (see appendix 1). On the Y-axis the reported analysis results are plotted. The corresponding laboratory numbers are on the X-axis.

The straight horizontal line presents the consensus value (a trimmed mean). The four striped lines, parallel to the consensus value line, are the +3s, +2s, -2s and -3s target reproducibility limits of the selected standard. Outliers and other data, which were excluded from the calculations, are represented as a cross. Accepted data are represented as a triangle.

Furthermore, Kernel Density Graphs were made. This is a method for producing a smooth density approximation to a set of data that avoids some problems associated with histograms. Also a normal Gauss curve was projected over the Kernel Density Graph for reference.

3.3 Z-SCORES

To evaluate the performance of the participating laboratories the z-scores were calculated. As it was decided to evaluate the performance of the participants in this proficiency test (PT) against the literature requirements, the z-scores were calculated using a target standard deviation. This results in an evaluation, independent of the spread of this interlaboratory study.

The target standard deviation was calculated from the literature reproducibility by division with 2.8. In case no literature reproducibility was available, other target values were used. In some cases, a reproducibility of based on former iis proficiency tests could be used.

When a laboratory did use a test method with a reproducibility that is significantly different from the reproducibility of the reference test method used in this report, it is strongly advised to recalculate the z-score, while using the reproducibility of the actual test method used, this in order to evaluate whether the reported test result is fit-for-use.

The z-scores were calculated according to:

$$z_{(\text{target})} = (\text{test result} - \text{average of PT}) / \text{target standard deviation}$$

The $z_{(\text{target})}$ scores are listed in the result tables of appendix 1.

Absolute values for $z < 2$ are very common and absolute values for $z > 3$ are very rare. The usual interpretation of z-scores is as follows:

- $|z| < 1$ good
- $1 < |z| < 2$ satisfactory
- $2 < |z| < 3$ questionable
- $3 < |z|$ unsatisfactory

4 EVALUATION

In this interlaboratory study no problems were encountered with the dispatch of the samples. Only one participant did not report any test results and four participants reported after the final reporting date.

Finally, 170 laboratories reported 1258 numerical results. Observed were 66 statistically outlying test results, which is 5.2% of all results. In proficiency studies outlier percentages of 3% - 7.5% are quite normal.

4.1 EVALUATION PER PHTHALATE AND PER SAMPLE

In this section the reported test results are discussed per component and per sample.

The majority of the group (56%) reported to have used CPSC-CH-C1001-09 as test method. Also ISO14389 was mentioned as test method to be used by 12% of the laboratories. Both test methods are based on THF extraction. In this proficiency test, 123 of the 170 laboratories (72%) used a test method based on THF extraction.

Some other standard test methods were also used: EN14372 (Soxhlet extraction with diethyl ether) and in-house methods.

Regretfully, the CPSC method does not contain any precision statements. However, ISO14389:14 does provide precision data. There are precision data mentioned for 4 different methods in ISO14389. As method 4, prescribes the extraction with THF followed by precipitation with Acetonitril, and has the best recovery, it was therefore decided to choose the precision data of this method as target value.

General: Almost all laboratories did identify the materials of #16560 and #16561 correctly as PVC (see appendix 2). The majority of the group identified all added banned phthalates correctly: #16560 contained DIDP, DEHP, DiBP and DEP and sample #16561 contained DBP, DNOP, DnPP and DCHP.

Sample #16560

DEHP: The determination of DEHP may be problematic at the level of 0.145 %M/M. Twelve statistical outliers were detected. The calculated reproducibility after rejection of the statistical outliers is not in agreement with the estimated reproducibility of ISO14389:14.

DBP: The determination of DBP may be problematic at the level of 0.271 %M/M. Five statistical outliers were detected. The calculated reproducibility after rejection of the statistical outliers is not in agreement with the estimated reproducibility of ISO14389:14.

DNOP: The determination of DNOP may be problematic at the level of 0.180 %M/M. Twelve statistical outliers were detected. The calculated reproducibility after rejection of the statistical outliers is not in agreement with the estimated reproducibility of ISO14389:14. At least five laboratories reported a false negative test result.

DMP: The determination of DMP was not problematic at the level of 0.066 %M/M. Eight statistical outliers were detected. The calculated reproducibility after rejection of the statistical outliers is in full agreement with the estimated reproducibility of ISO14389:14.

For BBP, DIDP, DINP, DCP, DEP, DNHP, DIBP, DPHP, DNPP and DUP the group of participants agreed on a concentration below <0.02 %M/M. Therefore no significant conclusions were drawn for these phthalates.

Sample #16561

BBP: The determination of BBP may be problematic at the level of 0.184 %M/M. Ten statistical outliers were detected. The calculated reproducibility after rejection of the statistical outliers is not in agreement with the estimated reproducibility of ISO14389:14.

DEHP: The determination of DEHP may be problematic at the level of 0.467 %M/M. Twelve statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is not in agreement with the estimated reproducibility of ISO14389:14.

DIDP: Thirtysix laboratories reported a positive test result and thirty laboratories reported a less than result. As the consensus value is near or below the detection limit, no significant conclusions were drawn.

DINP: The determination of DINP may be problematic at the level of 0.266 %M/M. Five statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is not in agreement with the estimated reproducibility of ISO14389:14.

For DBP, DNOP, DCP, DEP, DMP, DNHP, DIBP, DPHP, DNPP and DUP the group of participants agreed on a concentration below <0.02 %M/M. Therefore no significant conclusions were drawn for these phthalates.

4.2 PERFORMANCE EVALUATION FOR THE GROUP OF LABORATORIES

A comparison has been made between the reproducibilities as found for the group of participating laboratories and the estimated reproducibilities of ISO14389:2014 (R_{target}) in the next tables:

Parameter	Unit	n	Average	$2.8 * sd$	R (target)
DEHP	%M/M	156	0.145	0.053	0.046
DBP	%M/M	163	0.271	0.090	0.068
DNOP	%M/M	125	0.180	0.090	0.057
DMP	%M/M	86	0.066	0.022	0.021

Table 5: overview of results for sample #16560

Parameter	Unit	n	Average	2.8 * sd	R (target)
BBP	%M/M	157	0.184	0.066	0.058
DEHP	%M/M	157	0.467	0.166	0.147
DIDP	%M/M	33	0.018	0.018	(0.006)
DINP	%M/M	154	0.266	0.140	0.084

Table 6: overview of results for sample #16561

4.3 COMPARISON OF THE PROFICIENCY TEST OF MAY 2016 WITH PREVIOUS PTS

	May 2016	May 2015	May 2014	April 2013
Number of reporting labs	170	184	169	170
Number of results reported	1258	1014	1226	1085
Statistical outliers	66	43	97	47
Percentage outliers	5.2%	4.2%	7.9%	4.3%

Table 7: comparison with previous proficiency tests

In proficiency tests, outlier percentages of 3% - 7.5% are quite normal.

The evolution of the reproducibilities for DINP, DBP, DEHP, BBP and DNOP content as observed in this proficiency scheme and the comparison with the findings in previous rounds are visualized in table 8.

	May 2016	May 2015	May 2014	April 2013	Feb 2012	Feb 2011	Feb 2010	Feb 2009	RSDR ISO 14389	RSDR EN 14372
DINP ¹⁾	19	--	20	20	26	12 – 17	15 ^T –60 ^E	--	11	9
DBP	12	15	17	14 – 74 ²⁾	11 – 16	17	14	19 ^T –22 ^E	11	9
DEHP	13 – 13	13	17 – 19	--	13 – 18	12 – 13	8 ^T – 55 ^E	16 ^E –19 ^T	11	9
BBP	13	--	12	13	11	13 – 15	14	21 ^E –45 ^T	11	9
DIDP	37 ³⁾	17	20	19 – 57 ²⁾	--	15	--	--	11	9
DNOP	18	23	21	--	20	15	--	--	11	9
DHP	--	--	--	--	--	11	--	--	11	9
DiBP	--	14	--	--	--	--	--	--	11	9
DEP	--	13	--	--	--	--	--	--	11	9
DnPP	--	15	--	--	--	--	--	--	11	9
DCHP	--	16	--	--	--	--	--	--	11	9
DMP	12	--	--	--	--	--	--	--	11	9

Table 8: Comparison of uncertainties (relative in %) of phthalates in this PT and previous PTs (E=EN14372; T=THF dissolution)

1) Mix of DINP-1 and DINP-2 isomers

2) sample with 37% DINP present

3) consensus value near to or below the detection limit

From the above table it is clear that some improvement is visible for a number of individual phthalates.

From 2008 - 2010 significant differences between the EN14372 results and the results from THF dissolution were observed. In the PTs of 2011 – 2014 this was no longer the case.

In the proficiency test of 2015 and 2016, the majority of laboratories used THF as extraction solvent.

The uncertainty appears to stabilise at 13-17% for all phthalates except DNOP.

The estimated target (RSDR) of 11%, derived from the repeatability coefficient of variation of EN14372 (RSDr = 3%) may be too strict to be met. The precision statement in EN14389, containing a large variety of reproducibility values, is somewhat larger and is close to the uncertainties found in the iis PTs.

Sample #16561 was used in a previous PT; as sample #11012 in iis11P01. When the assigned value of both PTs are compared the resemblance is striking. See below table:

	unit	Average		2.8 * sd	
		#11012	#16561	#11012	#16561
BBP	%M/M	0.187	0.184	0.070	0.066
DEHP	%M/M	0.461	0.467	0.164	0.166
DIDP	%M/M	0.018	0.018	0.027	0.018
DINP	%M/M	0.271 *)	0.266	0.119	0.140

Table 9: comparison of samples #11012 and #16561

*) Was split up in DINP-1 and DINP-2

APPENDIX 1

Determination of DEHP – Bis-2-ethylhexylphthalate on sample #16560; results in %M/M

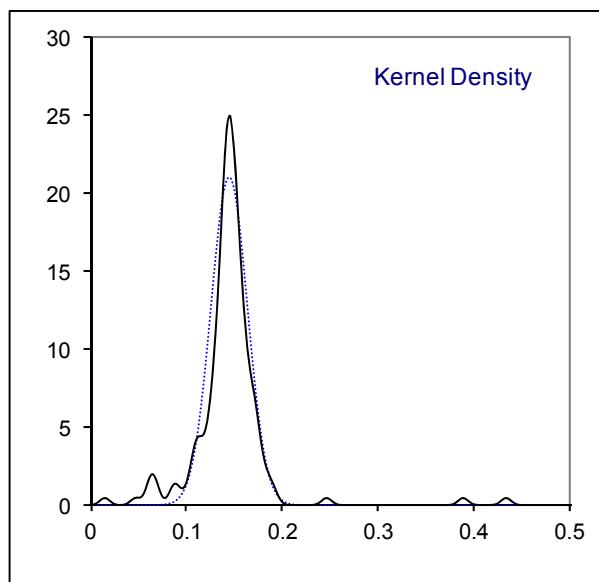
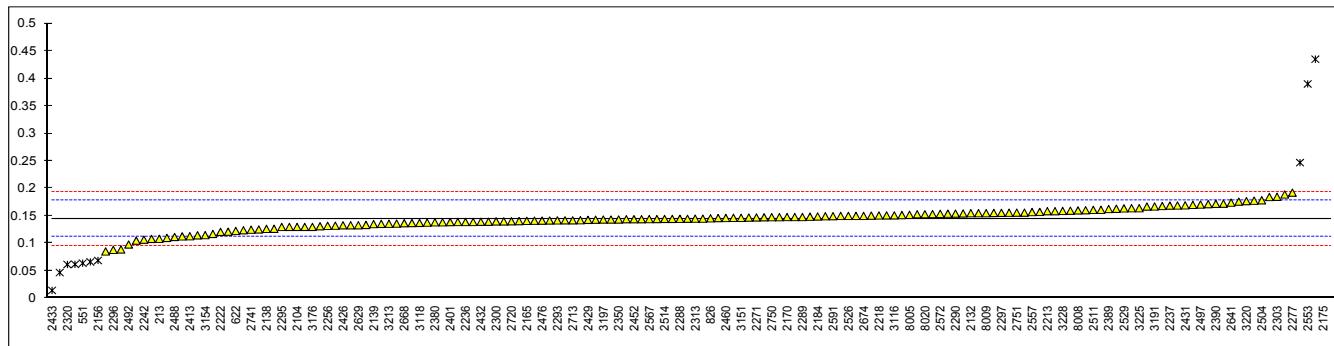
lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
213	CPSC-CH-C1001-09.3	0.1084		-2.24	2386	ISO14389	0.1389		-0.37
230	ISO14389	0.1714		1.63	2389	CPSC-CH-C1001-09.3	0.16250	C	1.08
330	In house	0.105		-2.45	2390	ISO14389	0.172		1.67
339	In house	0.1266		-1.12	2401	GB/T22048	0.1388		-0.37
348	In house	0.0854		-3.65	2410	CPSC-CH-C1001-09.3	0.1475		0.16
362	In house	0.1701	C	1.55	2413	In house	0.113		-1.96
551	In house	0.064	C,R(0.05)	-4.96	2415	In house	0.133		-0.73
622	EN14372	0.1227		-1.36	2425	ISO14389	0.1449		0.00
623	CPSC-CH-C1001-09.3	0.139		-0.36	2426	CPSC-CH-C1001-09.3	0.1329		-0.73
826	EN14372	0.1457		0.05	2429	CPSC-CH-C1001-09.3	0.1428		-0.13
840	CPSC-CH-C1001-09.3	0.1461		0.08	2431	CPSC-CH-C1001-09.3	0.1692		1.49
1051	EN14372	0.1239		-1.29	2432	CPSC-CH-C1001-09.3	0.1393		-0.34
1132	In house	0.0890		-3.43	2433	CPSC-CH-C1001-09.3	0.01450	R(0.01)	-8.00
1170	----	----		----	2442	In house	0.144		-0.05
2104	CPSC-CH-C1001-09.3	0.1300		-0.91	2449	CPSC-CH-C1001-09.3	0.1431		-0.11
2115	CPSC-CH-C1001-09.3	0.047	R(0.01)	-6.00	2452	CPSC-CH-C1001-09.3	0.144		-0.05
2120	CPSC-CH-C1001-09.3	0.136		-0.54	2453	CPSC-CH-C1001-09.3	0.147		0.13
2121	ISO14389	0.1082		-2.25	2459	ISO14389	0.1586		0.84
2129	ISO14389	0.176		1.91	2460	CPSC-CH-C1001-09.3	0.1462		0.08
2131	In house	0.06195	R(0.05)	-5.09	2467	CPSC-CH-C1001-09.3	0.1611		1.00
2132	CPSC-CH-C1001-09.3	0.1550		0.62	2475	In house	0.1689		1.47
2135	ISO14389	0.1505		0.35	2476	CPSC-CH-C1001-09.3	0.1414		-0.21
2138	In house	0.1264		-1.13	2488	In house	0.1117	C	-2.03
2139	CPSC-CH-C1001-09.3	0.1351		-0.60	2489	EN14372	0.151		0.38
2156	CPSC-CH-C1001-09.3	0.069	C,R(0.05)	-4.66	2492	In house	0.098		-2.88
2159	In house	0.1477		0.17	2495	CPSC-CH-C1001-09.3	0.13698		-0.48
2165	CPSC-CH-C1001-09.3	0.141		-0.24	2497	CPSC-CH-C1001-09.3	0.1706		1.58
2170	CPSC-CH-C1001-09.3	0.1480		0.19	2500	CPSC-CH-C1001-09.3	0.11721		-1.70
2175	EPA3550C/8270D	0.5496	R(0.01)	24.83	2504	CPSC-CH-C1001-09.3	0.1784		2.06
2184	CPSC-CH-C1001-09.3	0.149		0.25	2508	ISO14389	0.13		-0.91
2190	ISO8124-6	0.1844		2.43	2510	In house	0.578	C,R(0.01)	26.58
2213	CPSC-CH-C1001-09.3	0.1586		0.84	2511	ISO14389	0.161		0.99
2218	CPSC-CH-C1001-09.3	0.1508		0.36	2514	ISO14389	0.1446		-0.02
2222	In house	0.121		-1.46	2516	CPSC-CH-C1001-09.3	0.1128		-1.97
2223	In house	0.1384		-0.40	2526	ISO14389	0.15		0.32
2232	CPSC-CH-C1001-09.3	0.435	R(0.01)	17.80	2529	CPSC-CH-C1001-09.3	0.1637		1.16
2235	ISO-TS16181	0.1723	C	1.68	2532	CPSC-CH-C1001-09.3	0.1378		-0.43
2236	CPSC-CH-C1001-09.3	0.1389		-0.37	2549	CPSC-CH-C1001-09.3	0.14		-0.30
2237	In house	0.1687		1.46	2553	In house	0.39	C,R(0.01)	15.04
2241	CPSC-CH-C1001-09.3	0.1486		0.23	2557	CPSC-CH-C1001-09.3	0.1570		0.74
2242	CPSC-CH-C1001-09.3	0.1067		-2.34	2560	ISO14389	0.1213		-1.45
2246	CPSC-CH-C1001-09.3	0.154		0.56	2563	ISO14389	0.11		-2.14
2247	EN14372	0.1545		0.59	2567	CPSC-CH-C1001-09.3	0.1442		-0.04
2254	CPSC-CH-C1001-09.3	0.06636	R(0.05)	-4.82	2569	CPSC-CH-C1001-09.3	0.144		-0.05
2255	ISO14389	0.1420		-0.18	2572	CPSC-CH-C1001-09.3	0.1538		0.55
2256	CPSC-CH-C1001-09.3	0.132		-0.79	2590	CPSC-CH-C1001-09.3	0.1322		-0.78
2258	CPSC-CH-C1001-09.3	0.13117	C	-0.84	2591	CPSC-CH-C1001-09.3	0.1495		0.28
2271	CPSC-CH-C1001-09.3	0.1472		0.14	2629	CPSC-CH-C1001-09.3	0.1330		-0.73
2277	CPSC-CH-C1001-09.3	0.1923		2.91	2641	CPSC-CH-C1001-09.3	0.1741		1.79
2284	CPSC-CH-C1001-09.3	0.1595		0.90	2642	CPSC-CH-C1001-09.3	0.150		0.32
2288	CPSC-CH-C1001-09.3	0.1447		-0.01	2668	ISO14389	0.1367		-0.50
2289	ISO14389	0.148		0.19	2674	CPSC-CH-C1001-09.3	0.150		0.32
2290	CPSC-CH-C1001-09.3	0.1542		0.57	2678	CPSC-CH-C1001-09.3	0.189		2.71
2293	CPSC-CH-C1001-09.3	0.1419		-0.18	2708	----	----		----
2295	CPSC-CH-C1001-09.3	0.1299		-0.92	2713	CPSC-CH-C1001-09.3	0.1420		-0.18
2296	CPSC-CH-C1001-09.3	0.088340		-3.47	2719	CPSC-CH-C1001-09.3	0.1336		-0.69
2297	CPSC-CH-C1001-09.3	0.1556	C	0.66	2720	CPSC-CH-C1001-09.3	0.1402		-0.29
2300	ISO14389	0.14		-0.30	2736	CPSC-CH-C1001-09.3	0.1446		-0.02
2303	CPSC-CH-C1001-09.3	0.1848		2.45	2737	CPSC-CH-C1001-09.3	0.1630		1.11
2309	CPSC-CH-C1001-09.3	0.13		-0.91	2741	CPSC-CH-C1001-09.3	0.125		-1.22
2310	CPSC-CH-C1001-09.3	0.1417		-0.19	2744	CPSC-CH-C1001-09.3	0.1515		0.41
2311	CPSC-CH-C1001-09.3	0.1465		0.10	2750	CPSC-CH-C1001-09.3	0.1476		0.17
2313	CPSC-CH-C1001-09.3	0.1450		0.01	2751	CPSC-CH-C1001-09.3	0.1560		0.68
2314	CPSC-CH-C1001-09.3	0.1394		-0.34	3110	ST Part 3	0.156		0.68
2316	CPSC-CH-C1001-09.3	0.1406		-0.26	3116	EN14372	0.151		0.38
2320	EN14372	0.061719	C,R(0.05)	-5.10	3117	EN14372	0.1147		-1.85
2330	CPSC-CH-C1001-09.3	0.148		0.19	3118	CPSC-CH-C1001-09.3	0.1373		-0.46
2350	EN14372	0.1435		-0.08	3146	CPSC-CH-C1001-09.3	0.1254		-1.19
2353	EN14372	0.1554		0.65	3150	ISO14389	0.1603		0.95
2358	CPSC-CH-C1001-09.3	0.1572		0.76	3151	ISO14389	0.1465		0.10
2375	CPSC-CH-C1001-09.3	0.150		0.32	3153	CPSC-CH-C1001-09.3	0.1558		0.67
2379	EN14372	0.145		0.01	3154	TR16178	0.115		-1.83
2380	In house	0.1383		-0.40	3163	In house	0.2469	R(0.01)	6.26
2384	CPSC-CH-C1001-09.3	0.1413		-0.22	3166	In house	0.164		1.17

3172	ISO14389	0.168	1.42	3233	In house	0.1777	2.01
3176	EN14372	0.1300	-0.91	3237	In house	0.1443	-0.03
3182	CPSC-CH-C1001-09.3	0.167	1.36	3238	-----	-----	-----
3191	CPSC-CH-C1001-09.3	0.1671	1.36	3239	INH-134	0.14936	0.28
3197	CPSC-CH-C1001-09.3	0.1434	-0.09	3248	In house	0.1356	-0.57
3200	CPSC-CH-C1001-09.3	0.1434	-0.09	8005	GB22048	0.152	0.44
3210	In house	0.1421	-0.17	8006	JTSS ST 2012	0.153	0.50
3213	KS-M1991	0.1358	-0.56	8007	CPSC-CH-C1001-09.3	0.155	0.62
3214	CPSC-CH-C1001-09.3	0.1533	0.52	8008	CPSC-CH-C1001-09.3	0.160	0.93
3220	CPSC-CH-C1001-09.3	0.1769	1.97	8009	EN14372	0.155	0.62
3225	CPSC-CH-C1001-09.3	0.164	1.17	8020	JTSS ST 2012	0.153	0.50
3228	CPSC-CH-C1001-09.3	0.159	0.87				

normality OK
 n 156
 outliers 12
 mean (n) 0.1449
 st.dev. (n) 0.01906
 R(calc.) 0.0534
 R(ISO14389:14) 0.0456

Compare R(Horwitz) = 0.0217

Lab 362: first reported 0.2252
 Lab 551: first reported 0.14
 Lab 2156: first reported 0.0563
 Lab 2235: first reported 0.07938
 Lab 2258: first reported 0.19799
 Lab 2297: first reported 1.5563
 Lab 2320: first reported 0.08696
 Lab 2389: first reported 0.342996
 Lab 2488: first reported 0.0885
 Lab 2510: first reported 0.204
 Lab 2553: first reported 0.2829



Determination of DBP – Dibutylphthalate on sample #16560; results in %M/M

lab	Method	value	mark	z(targ)	lab	method	value	mark	z(targ)
213	CPSC-CH-C1001-09.3	0.1871		-2.75	2386	ISO14389	0.2372		-1.11
230	ISO14389	0.3153		1.46	2389	CPSC-CH-C1001-09.3	0.313302		1.39
330	In house	0.218		-1.74	2390	ISO14389	0.280		0.30
339	In house	0.2791		0.27	2401	GB/T22048	0.2557		-0.50
348	In house	0.2692		-0.06	2410	CPSC-CH-C1001-09.3	0.2670		-0.13
362	In house	0.3160		1.48	2413	In house	0.238		-1.08
551	In house	0.18		-2.98	2415	In house	0.272		0.04
622	EN14372	0.2507		-0.66	2425	ISO14389	0.2777		0.22
623	CPSC-CH-C1001-09.3	0.298		0.89	2426	CPSC-CH-C1001-09.3	0.2572		-0.45
826	EN14372	0.2649		-0.20	2429	CPSC-CH-C1001-09.3	0.2633		-0.25
840	CPSC-CH-C1001-09.3	0.2497		-0.70	2431	CPSC-CH-C1001-09.3	0.293		0.72
1051	EN14372	0.2740		0.10	2432	CPSC-CH-C1001-09.3	0.2270		-1.44
1132	In house	0.2191		-1.70	2433	CPSC-CH-C1001-09.3	0.04367	R(0.01)	-7.46
1170	CPSC-CH-C1001-09.3	0.316		1.48	2442	In house	0.1875		-2.74
2104	CPSC-CH-C1001-09.3	0.2446		-0.86	2449	CPSC-CH-C1001-09.3	0.2836		0.42
2115	CPSC-CH-C1001-09.3	0.299		0.92	2452	CPSC-CH-C1001-09.3	0.262		-0.29
2120	CPSC-CH-C1001-09.3	0.287		0.53	2453	CPSC-CH-C1001-09.3	0.258		-0.42
2121	ISO14389	0.1855		-2.80	2459	ISO14389	0.2940		0.76
2129	ISO14389	0.353		2.69	2460	CPSC-CH-C1001-09.3	0.2908		0.65
2131	In house	0.11285	R(0.01)	-5.19	2467	CPSC-CH-C1001-09.3	0.2506		-0.67
2132	CPSC-CH-C1001-09.3	0.2900		0.63	2475	In house	0.3061		1.15
2135	ISO14389	0.3000		0.95	2476	CPSC-CH-C1001-09.3	0.2735		0.08
2138	In house	0.2648		-0.20	2488	In house	0.1913		-2.61
2139	CPSC-CH-C1001-09.3	0.2738		0.09	2489	EN14372	0.2913		0.67
2156	CPSC-CH-C1001-09.3	0.277	C	0.20	2492	In house	0.222		-1.60
2159	In house	0.2880		0.56	2495	CPSC-CH-C1001-09.3	0.2553		-0.51
2165	CPSC-CH-C1001-09.3	0.289		0.59	2497	CPSC-CH-C1001-09.3	0.3270		1.84
2170	CPSC-CH-C1001-09.3	0.2813		0.34	2500	CPSC-CH-C1001-09.3	0.25342		-0.57
2175	EPA3550C/8270D	0.5124	R(0.01)	7.92	2504	CPSC-CH-C1001-09.3	0.2919		0.69
2184	CPSC-CH-C1001-09.3	0.279		0.27	2508		----		----
2190	ISO8124-6	0.2755		0.15	2510	In house	0.280		0.30
2213	CPSC-CH-C1001-09.3	0.2987		0.91	2511	ISO14389	0.280		0.30
2218	CPSC-CH-C1001-09.3	0.2701		-0.03	2514	ISO14389	0.2753		0.14
2222	In house	0.237		-1.11	2516	CPSC-CH-C1001-09.3	0.2219		-1.61
2223	In house	0.2605		-0.34	2526	ISO14389	0.27		-0.03
2232		----		----	2529	CPSC-CH-C1001-09.3	0.2892		0.60
2235	ISO-TS16181	0.17407		-3.18	2532	CPSC-CH-C1001-09.3	0.2797		0.29
2236	CPSC-CH-C1001-09.3	0.2593		-0.38	2549	CPSC-CH-C1001-09.3	0.28		0.30
2237	In house	0.2936		0.74	2553	In house	0.2197		-1.68
2241	CPSC-CH-C1001-09.3	0.2839		0.43	2557	CPSC-CH-C1001-09.3	0.3142		1.42
2242	CPSC-CH-C1001-09.3	0.2098		-2.01	2560	ISO14389	0.2316		-1.29
2246	CPSC-CH-C1001-09.3	0.291		0.66	2563	ISO14389	0.30		0.95
2247	EN14372	0.2883		0.57	2567	CPSC-CH-C1001-09.3	0.281		0.33
2254	CPSC-CH-C1001-09.3	0.21454		-1.85	2569	CPSC-CH-C1001-09.3	0.298		0.89
2255	ISO14389	0.2800		0.30	2572	CPSC-CH-C1001-09.3	0.2869		0.52
2256	CPSC-CH-C1001-09.3	0.261		-0.33	2590	CPSC-CH-C1001-09.3	0.2911		0.66
2258	CPSC-CH-C1001-09.3	0.20096		-2.30	2591	CPSC-CH-C1001-09.3	0.3092		1.26
2271	CPSC-CH-C1001-09.3	0.2959		0.82	2629	CPSC-CH-C1001-09.3	0.2329		-1.25
2277	CPSC-CH-C1001-09.3	0.2315		-1.29	2641	CPSC-CH-C1001-09.3	0.2751		0.14
2284	CPSC-CH-C1001-09.3	0.2967		0.85	2642	CPSC-CH-C1001-09.3	0.288		0.56
2288	CPSC-CH-C1001-09.3	0.277		0.20	2668	ISO14389	0.2697		-0.04
2289	ISO14389	0.254		-0.56	2674	CPSC-CH-C1001-09.3	0.280		0.30
2290	CPSC-CH-C1001-09.3	0.2877		0.55	2678	CPSC-CH-C1001-09.3	0.293		0.72
2293	CPSC-CH-C1001-09.3	0.2746		0.12	2708	KS-M1991	0.3077		1.21
2295	CPSC-CH-C1001-09.3	0.2892		0.60	2713	CPSC-CH-C1001-09.3	0.2682		-0.09
2296	CPSC-CH-C1001-09.3	0.11517	R(0.01)	-5.11	2719	CPSC-CH-C1001-09.3	0.2641		-0.22
2297	CPSC-CH-C1001-09.3	0.2838	C	0.42	2720	CPSC-CH-C1001-09.3	0.2569		-0.46
2300	ISO14389	0.25		-0.69	2736	CPSC-CH-C1001-09.3	0.2686		-0.08
2303	CPSC-CH-C1001-09.3	0.3393		2.24	2737	CPSC-CH-C1001-09.3	0.2980		0.89
2309	CPSC-CH-C1001-09.3	0.298		0.89	2741	CPSC-CH-C1001-09.3	0.279		0.27
2310	CPSC-CH-C1001-09.3	0.2741		0.10	2744	CPSC-CH-C1001-09.3	0.2601		-0.35
2311	CPSC-CH-C1001-09.3	0.2924		0.70	2750	CPSC-CH-C1001-09.3	0.285		0.46
2313	CPSC-CH-C1001-09.3	0.3082		1.22	2751	CPSC-CH-C1001-09.3	0.2515		-0.64
2314	CPSC-CH-C1001-09.3	0.2912		0.67	3110	ST Part 3	0.276		0.17
2316	CPSC-CH-C1001-09.3	0.2952		0.80	3116	EN14372	0.296		0.82
2320	EN14372	0.1961		-2.45	3117	EN14372	0.2281		-1.40
2330	CPSC-CH-C1001-09.3	0.265		-0.19	3118	CPSC-CH-C1001-09.3	0.2447		-0.86
2350	EN14372	0.276875		0.20	3146	CPSC-CH-C1001-09.3	0.2577		-0.43
2353	EN14372	0.2953		0.80	3150	ISO14389	0.2939		0.75
2358	CPSC-CH-C1001-09.3	0.2892		0.60	3151	ISO14389	0.2518		-0.63
2375	CPSC-CH-C1001-09.3	0.272		0.04	3153	CPSC-CH-C1001-09.3	0.2862		0.50
2379	EN14372	0.278		0.23	3154	TR16178	0.212		-1.93
2380	In house	0.2629		-0.26	3163	In house	0.4749	R(0.01)	6.69
2384	CPSC-CH-C1001-09.3	0.3096		1.27	3166	In house	0.208		-2.06

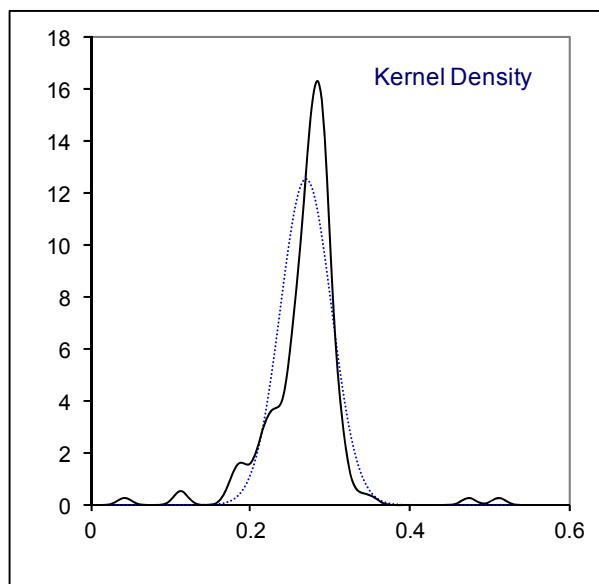
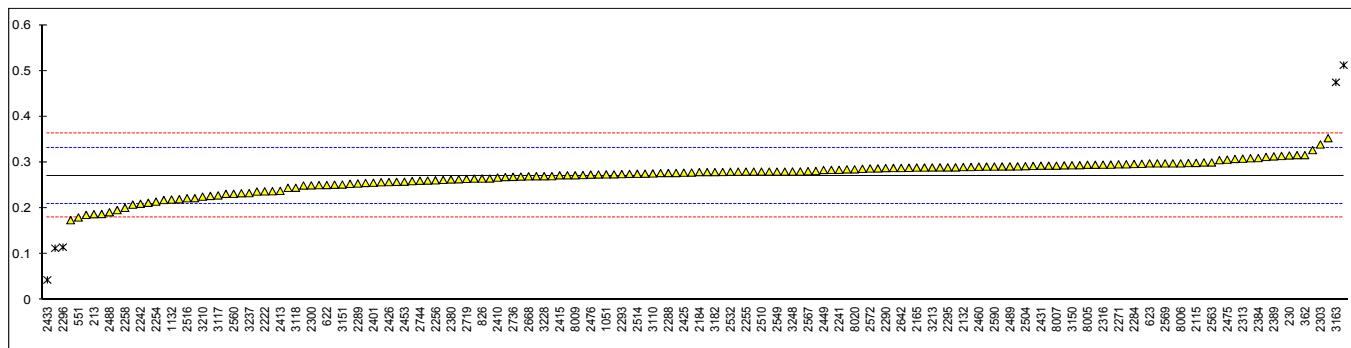
3172	ISO14389	0.312	1.35	3233	In house	0.2799	0.29
3176	EN14372	0.2725	0.05	3237	In house	0.233	-1.24
3182	CPSC-CH-C1001-09.3	0.279	0.27	3238	-----	-----	-----
3191	CPSC-CH-C1001-09.3	0.2890	0.59	3239	INH-134	0.291429	0.67
3197	CPSC-CH-C1001-09.3	0.2803	0.31	3248	In house	0.2802	0.30
3200	CPSC-CH-C1001-09.3	0.2951	0.79	8005	GB22048	0.295	0.79
3210	In house	0.2254	-1.49	8006	JTSS ST 2012	0.298	0.89
3213	KS-M1991	0.2891	0.60	8007	CPSC-CH-C1001-09.3	0.293	0.72
3214	CPSC-CH-C1001-09.3	0.305	1.12	8008	CPSC-CH-C1001-09.3	0.297	0.86
3220	CPSC-CH-C1001-09.3	0.2365	-1.13	8009	EN14372	0.272	0.04
3225	CPSC-CH-C1001-09.3	0.29	0.63	8020	JTSS ST 2012	0.285	0.46
3228	CPSC-CH-C1001-09.3	0.270	-0.03				

normality OK
 n 163
 outliers 5
 mean (n) 0.2709
 st.dev. (n) 0.03195
 R(calc.) 0.0895
 R(ISO14389:14) 0.0683

Compare R(Horwitz) = 0.0554

Lab 2156: first reported 0.2313

Lab 2297: first reported 2.8383



Determination of DNOP – Di-n-Octylphthalate on sample #16560; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
213	CPSC-CH-C1001-09.3	0	ex, false -	-8.89	2386	ISO14389	0.1632		-0.81
230		----		----	2389		0.16990	C	-0.48
330	In house	ND		----	2390	ISO14389	0.174783	C	-0.23
339	In house	<0.0005	false -?	<-8.86	2401	CPSC-CH-C1001-09.3	0.2178		1.89
348	In house	n.d.		----	2413	In house	ND		----
362	In house	0.6581	C,R(0.01)	23.70	2415	In house	0.156		-1.16
551	In house	1.82	C,R(0.01)	81.22	2425	ISO14389	0.1529		-1.32
622	EN14372	0.0332	C,R(0.01)	-7.25	2426	CPSC-CH-C1001-09.3	0.1769		-0.13
623	CPSC-CH-C1001-09.3	n.d.		----	2429	CPSC-CH-C1001-09.3	0.1718		-0.38
826	EN14372	0.2280		2.40	2431	CPSC-CH-C1001-09.3	0.1817		0.11
840	CPSC-CH-C1001-09.3	0.1681		-0.57	2432	CPSC-CH-C1001-09.3	0.2024		1.13
1051	EN14372	0.1479		-1.57	2433	CPSC-CH-C1001-09.3	0.4794	R(0.01)	14.85
1132	In house	0.1065		-3.62	2442	In house	0.176		-0.17
1170		n.a.		----	2449	CPSC-CH-C1001-09.3	ND	C	----
2104	CPSC-CH-C1001-09.3	0.1519		-1.37	2452		----		----
2115	CPSC-CH-C1001-09.3	0.131		-2.40	2453		----		----
2120	CPSC-CH-C1001-09.3	0.157	C	-1.12	2459	ISO14389	0.1416	C	-1.88
2121		----		----	2460	CPSC-CH-C1001-09.3	0.1515		-1.39
2129	ISO14389	0.235		2.75	2467	CPSC-CH-C1001-09.3	0.1953		0.78
2131	In house	0.07675		-5.09	2475	In house	0.2035		1.19
2132	CPSC-CH-C1001-09.3	0.1950		0.77	2476	CPSC-CH-C1001-09.3	0.1610		-0.92
2135	ISO14389	0.229		2.45	2488	In house	0.1704	C	-0.45
2138	In house	0.1439		-1.76	2489	EN14372	0.1641		-0.76
2139	CPSC-CH-C1001-09.3	0.2021		1.12	2492	In house	0.180		0.02
2156	CPSC-CH-C1001-09.3	0.0986		-4.01	2495	CPSC-CH-C1001-09.3	0.19948		0.99
2159	In house	0.1988		0.95	2497	CPSC-CH-C1001-09.3	0.1900		0.52
2165	CPSC-CH-C1001-09.3	0.187		0.37	2500	CPSC-CH-C1001-09.3	0.15321		-1.30
2170	CPSC-CH-C1001-09.3	0.1699		-0.48	2504	CPSC-CH-C1001-09.3	5.1977	R(0.01)	248.46
2175	EPA3550C/8270D	0.5118	R(0.01)	16.45	2508	ISO14389	0.07		-5.42
2184	CPSC-CH-C1001-09.3	0.182		0.12	2510		----		----
2190	ISO8124-6	<0.01	false -?	<-8.39	2511	ISO14389	0.184		0.22
2213	CPSC-CH-C1001-09.3	0.1888		0.46	2514	ISO14389	0.1861		0.33
2218		----		----	2516	CPSC-CH-C1001-09.3	0.1252		-2.69
2222	In house	0.151		-1.41	2526	ISO14389	0.165		-0.72
2223	In house	0.170		-0.47	2529	CPSC-CH-C1001-09.3	0.1831		0.18
2232		----		----	2532	CPSC-CH-C1001-09.3	0.1619		-0.87
2235		----		----	2549	CPSC-CH-C1001-09.3	0.16		-0.97
2236	CPSC-CH-C1001-09.3	0.1963		0.83	2553	In house	3.4672	R(0.01)	162.78
2237	In house	0.2243		2.22	2557	CPSC-CH-C1001-09.3	0.2615		4.06
2241	CPSC-CH-C1001-09.3	0.1893		0.48	2560	ISO14389	0.1663		-0.65
2242	CPSC-CH-C1001-09.3	0.1422		-1.85	2563		----		----
2246	CPSC-CH-C1001-09.3	0.196		0.82	2567	CPSC-CH-C1001-09.3	0.1721		-0.37
2247	EN14372	0.1600		-0.97	2569	CPSC-CH-C1001-09.3	0.167		-0.62
2254	CPSC-CH-C1001-09.3	<0.004	false -?	<-8.69	2572	CPSC-CH-C1001-09.3	0.2013		1.08
2255	ISO14389	0.1875		0.39	2590	CPSC-CH-C1001-09.3	0.1604		-0.95
2256	CPSC-CH-C1001-09.3	0.158		-1.07	2591	CPSC-CH-C1001-09.3	0.1785		-0.05
2258	CPSC-CH-C1001-09.3	0.18062		0.05	2629	CPSC-CH-C1001-09.3	0.1773		-0.11
2271	CPSC-CH-C1001-09.3	0.1651		-0.71	2641	CPSC-CH-C1001-09.3	ND		----
2277	CPSC-CH-C1001-09.3	0.01785	C,R(0.01)	-8.01	2642	CPSC-CH-C1001-09.3	0.198		0.91
2284	CPSC-CH-C1001-09.3	0.154		-1.26	2668	ISO14389	0.1493		-1.50
2288	CPSC-CH-C1001-09.3	0.184		0.22	2674	CPSC-CH-C1001-09.3	0.185		0.27
2289	ISO14389	0.180		0.02	2678	CPSC-CH-C1001-09.3	0.150		-1.46
2290	CPSC-CH-C1001-09.3	0.2006		1.04	2708		----		----
2293		----		----	2713	CPSC-CH-C1001-09.3	0.1838	C	0.21
2295		----		----	2719	CPSC-CH-C1001-09.3	0.1791		-0.02
2296	CPSC-CH-C1001-09.3	0.168424		-0.55	2720	CPSC-CH-C1001-09.3	0.1888		0.46
2297	CPSC-CH-C1001-09.3	0.1562		-1.16	2736	CPSC-CH-C1001-09.3	14.9484	R(0.01)	731.24
2300	ISO14389	8.48	C,R(0.01)	410.98	2737		----		----
2303	CPSC-CH-C1001-09.3	0.1438		-1.77	2741	CPSC-CH-C1001-09.3	0.214		1.71
2309	CPSC-CH-C1001-09.3	0.17		-0.47	2744	CPSC-CH-C1001-09.3	0.2475		3.37
2310	CPSC-CH-C1001-09.3	0.1808		0.06	2750	CPSC-CH-C1001-09.3	0.2575		3.86
2311	CPSC-CH-C1001-09.3	0.1903		0.53	2751	CPSC-CH-C1001-09.3	0.2601		3.99
2313	CPSC-CH-C1001-09.3	0.1955		0.79	3110		----		----
2314	CPSC-CH-C1001-09.3	0.1723		-0.36	3116	EN14372	0.198		0.91
2316	CPSC-CH-C1001-09.3	0.2268		2.34	3117	EN14372	0.2448		3.23
2320	EN14372	0.1413		-1.89	3118	CPSC-CH-C1001-09.3	0.1806		0.05
2330	CPSC-CH-C1001-09.3	<0.003	false -?	<-8.74	3146	CPSC-CH-C1001-09.3	0.1597		-0.98
2350	EN14372	0.2200		2.00	3150	ISO14389	0.2247		2.24
2353	EN14372	0.1939		0.71	3151	ISO14389	0.1960		0.82
2358	CPSC-CH-C1001-09.3	0.2021		1.12	3153	CPSC-CH-C1001-09.3	0.2086		1.44
2375	CPSC-CH-C1001-09.3	0.186		0.32	3154	TR16178	1.072	R(0.01)	44.19
2379	EN14372	0.127		-2.60	3163		----		----
2380		----		----	3166	In house	0.239		2.94
2384	CPSC-CH-C1001-09.3	0.2272	C	2.36					

3172	ISO14389	0.185	0.27	3233	---	---	---
3176		----	----	3237	In house	0.1687	-0.54
3182	CPSC-CH-C1001-09.3	0.175	-0.22	3238		----	----
3191	CPSC-CH-C1001-09.3	0.1898	0.51	3239		----	----
3197	CPSC-CH-C1001-09.3	0.1915	0.59	3248	In house	0.1564	-1.15
3200	CPSC-CH-C1001-09.3	0.1732	-0.31	8005	GB22048	0.197	0.87
3210	In house	0.1510	-1.41	8006	JTSS ST 2012	0.196	0.82
3213	KS-M1991	0.1791	-0.02	8007	CPSC-CH-C1001-09.3	0.194	0.72
3214	CPSC-CH-C1001-09.3	0.2079	1.40	8008		----	----
3220	CPSC-CH-C1001-09.3	0.1800	0.02	8009		----	----
3225	CPSC-CH-C1001-09.3	0.165	-0.72	8020	JTSS ST 2012	0.177	-0.13
3228	CPSC-CH-C1001-09.3	0.179	-0.03				

normality suspect

n 125

outliers 11 (+ 1 excl)

mean (n) 0.1795

st.dev. (n) 0.03199

R(calc.) 0.0896

R(ISO14389:14) 0.0566

Compare R(Horwitz) = 0.0391

Lab 213: result excluded zero is not a real result

Lab 362: first reported 0.3798

Lab 551: first reported 4.92

Lab 622: first reported 0.0416

Lab 2120: first reported n.d.

Lab 2277: first reported <0.006

Lab 2300: first reported n.d.

Lab 2384: first reported 0.3218

Lab 2389: first reported n.d.

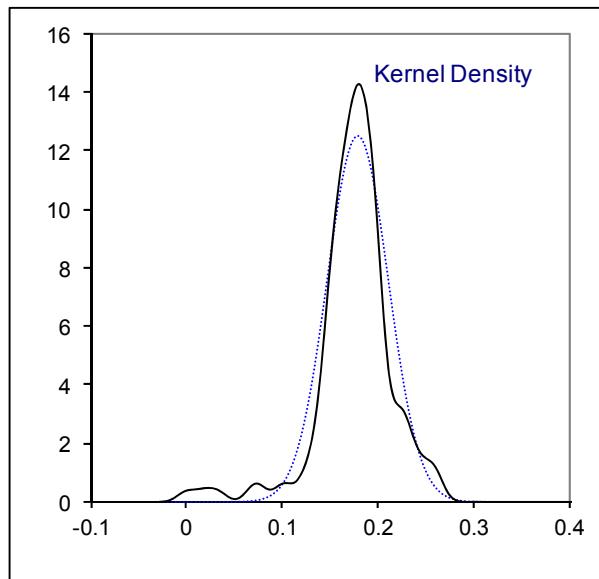
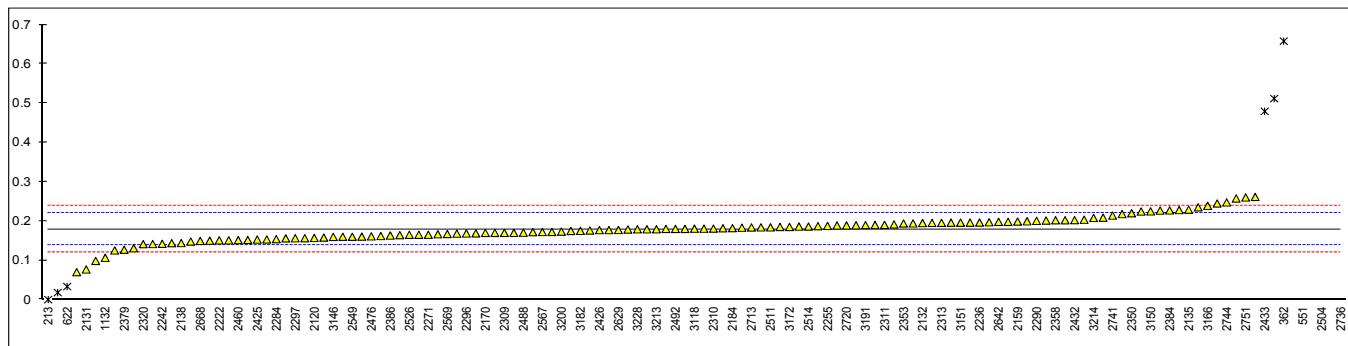
Lab 2390: first reported n.d.

Lab 2449: first reported 0.0138

Lab 2459: first reported 0.0144

Lab 2488: first reported n.d.

Lab 2713: first reported <0.0050



Determination of DMP - Dimethylphthalate on sample #16560; results in %M/M

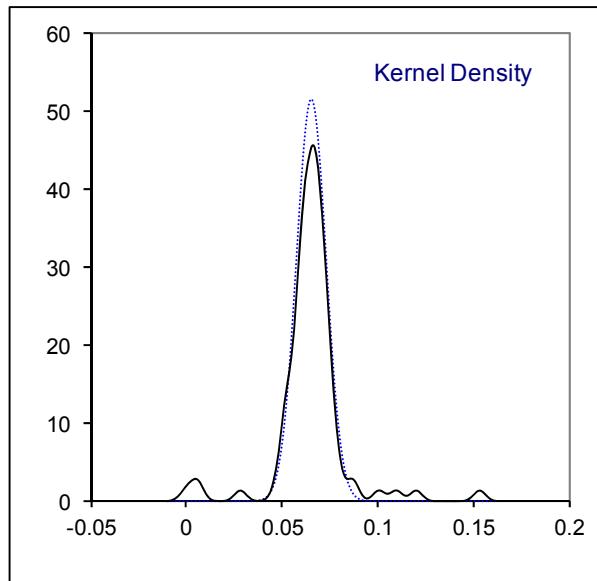
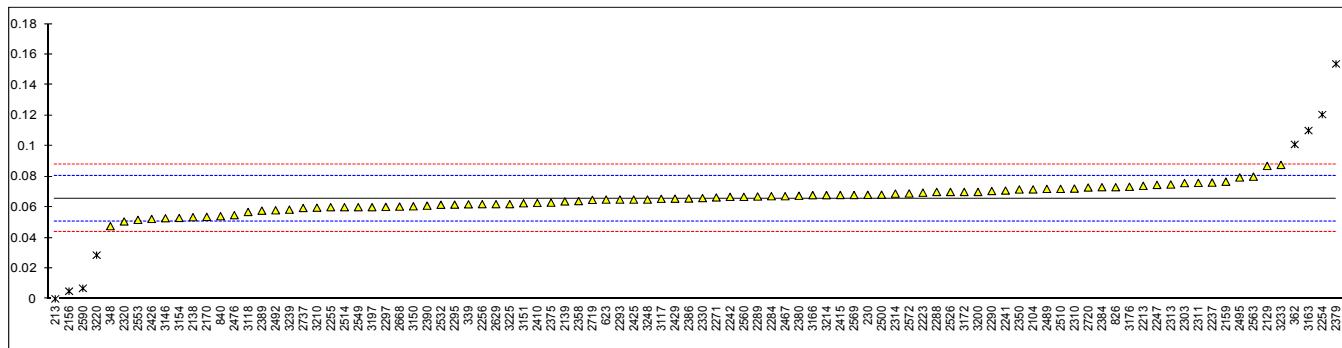
lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
213	CPSC-CH-C1001-09.3	0	R(0.01)	-8.89	2386	ISO14389	0.0657		0.00
230	ISO14389	0.0681		0.32	2389	CPSC-CH-C1001-09.3	0.05774	C	-1.08
330	----	----		----	2390	ISO14389	0.061		-0.64
339	In house	0.0619		-0.52	2401	CPSC-CH-C1001-09.3	0.0628		-0.39
348	In house	0.0476		-2.45	2410	CPSC-CH-C1001-09.3	0.0628		----
362	In house	0.1011	R(0.01)	4.79	2413	----	----		----
551	In house	ND		----	2415	In house	0.068		0.31
622	----	----		----	2425	ISO14389	0.0650		-0.10
623	CPSC-CH-C1001-09.3	0.065		-0.10	2426	CPSC-CH-C1001-09.3	0.0523		-1.81
826	EN14372	0.0731		1.00	2429	CPSC-CH-C1001-09.3	0.0656		-0.02
840	CPSC-CH-C1001-09.3	0.0541		-1.57	2431	----	----		----
1051	----	----		----	2432	----	----		----
1132	----	----		----	2433	----	----		----
1170	NA	----		----	2442	----	----		----
2104	CPSC-CH-C1001-09.3	0.07167		0.81	2449	----	----		----
2115	----	----		----	2452	----	----		----
2120	----	----		----	2453	----	----		----
2121	----	----		----	2459	----	----		----
2129	ISO14389	0.087		2.88	2460	----	----		----
2131	----	----		----	2467	CPSC-CH-C1001-09.3	0.0672		0.20
2132	----	W		----	2475	----	----		----
2135	----	----		----	2476	CPSC-CH-C1001-09.3	0.0548		-1.48
2138	In house	0.0535		-1.65	2488	In house	na	C	----
2139	CPSC-CH-C1001-09.3	0.0638		-0.26	2489	EN14372	0.072		0.85
2156	CPSC-CH-C1001-09.3	0.005	R(0.01)	-8.21	2492	In house	0.058		-1.04
2159	In house	0.0767		1.49	2495	CPSC-CH-C1001-09.3	0.07948		1.86
2165	CPSC-CH-C1001-09.3	NA	C	----	2497	----	W	----	----
2170	CPSC-CH-C1001-09.3	0.0537		-1.63	2500	CPSC-CH-C1001-09.3	0.06821		0.34
2175	----	----		----	2504	CPSC-CH-C1001-09.3	<0.006	false -	<-8.08
2184	CPSC-CH-C1001-09.3	N.A.		----	2508	----	----		----
2190	ISO8124-6	NP		----	2510	In house	0.072		0.85
2213	CPSC-CH-C1001-09.3	0.074		1.12	2511	----	----		----
2218	----	----		----	2514	ISO14389	0.0600		-0.77
2222	----	----		----	2516	----	----		----
2223	In house	0.06951		0.51	2526	ISO14389	0.07		0.58
2232	----	----		----	2529	----	----		----
2235	----	----		----	2532	CPSC-CH-C1001-09.3	0.0616		-0.56
2236	----	----		----	2549	CPSC-CH-C1001-09.3	0.06		-0.77
2237	In house	0.0761		1.40	2553	In house	0.0517		-1.90
2241	CPSC-CH-C1001-09.3	0.0709		0.70	2557	----	----		----
2242	CPSC-CH-C1001-09.3	0.0668		0.15	2560	ISO14389	0.0668		0.15
2246	----	----		----	2563	ISO14389	0.08		1.93
2247	EN14372	0.0746		1.20	2567	CPSC-CH-C1001-09.3	--		----
2254	CPSC-CH-C1001-09.3	0.12062	R(0.01)	7.43	2569	CPSC-CH-C1001-09.3	0.068		0.31
2255	ISO14389	0.06		-0.77	2572	CPSC-CH-C1001-09.3	0.0690		0.44
2256	CPSC-CH-C1001-09.3	0.062		-0.50	2590	CPSC-CH-C1001-09.3	0.006912	R(0.01)	-7.95
2258	----	----		----	2591	----	----		----
2271	CPSC-CH-C1001-09.3	0.0664		0.09	2629	CPSC-CH-C1001-09.3	0.0620		-0.50
2277	----	----		----	2641	----	----		----
2284	CPSC-CH-C1001-09.3	0.0672		0.20	2642	----	----		----
2288	CPSC-CH-C1001-09.3	0.070		0.58	2668	ISO14389	0.0604		-0.72
2289	ISO14389	0.067		0.17	2674	CPSC-CH-C1001-09.3	N/A		----
2290	CPSC-CH-C1001-09.3	0.0706		0.66	2678	----	----		----
2293	CPSC-CH-C1001-09.3	0.065		-0.10	2708	----	----		----
2295	CPSC-CH-C1001-09.3	0.0617		-0.54	2713	----	----		----
2296	----	----		----	2719	CPSC-CH-C1001-09.3	0.0648		-0.12
2297	CPSC-CH-C1001-09.3	0.0602		-0.75	2720	CPSC-CH-C1001-09.3	0.0729		0.97
2300	ISO14389	nd		----	2736	----	----		----
2303	CPSC-CH-C1001-09.3	0.0758		1.36	2737	CPSC-CH-C1001-09.3	0.0595		-0.84
2309	----	----		----	2741	----	----		----
2310	CPSC-CH-C1001-09.3	0.0722		0.88	2744	----	----		----
2311	CPSC-CH-C1001-09.3	0.0759		1.38	2750	----	----		----
2313	CPSC-CH-C1001-09.3	0.07487		1.24	2751	----	----		----
2314	CPSC-CH-C1001-09.3	0.0689		0.43	3110	----	----		----
2316	CPSC-CH-C1001-09.3	NA		----	3116	----	----		----
2320	EN14372	0.05069		-2.03	3117	EN14372	0.0655		-0.03
2330	CPSC-CH-C1001-09.3	0.066		0.04	3118	CPSC-CH-C1001-09.3	0.0569		-1.19
2350	EN14372	0.071625		0.80	3146	CPSC-CH-C1001-09.3	0.05278		-1.75
2353	----	----		----	3150	ISO14389	0.0606		-0.69
2358	CPSC-CH-C1001-09.3	0.0640		-0.23	3151	ISO14389	0.0626		-0.42
2375	CPSC-CH-C1001-09.3	0.063		-0.37	3153	----	----		----
2379	EN14372	0.153818	C,R(0.01)	11.92	3154	TR16178	0.053		-1.72
2380	In house	0.0675		0.24	3163	In house	0.1102	R(0.01)	6.02
2384	CPSC-CH-C1001-09.3	0.0731	C	1.00	3166	In house	0.0679		0.30

3172	ISO14389	0.070		0.58	3233	In house	0.0877	2.97
3176	EN14372	0.0734		1.04	3237		-----	-----
3182		-----		-----	3238		-----	-----
3191	CPSC-CH-C1001-09.3	<0.01	false -	<-7.54	3239	INH-134	0.058385	-0.99
3197	CPSC-CH-C1001-09.3	0.06		-0.77	3248	In house	0.065	C -0.10
3200	CPSC-CH-C1001-09.3	0.0700		0.58	8005		-----	-----
3210	In house	0.0597		-0.81	8006		-----	-----
3213		-----		-----	8007		-----	-----
3214	CPSC-CH-C1001-09.3	0.0679		0.30	8008		-----	-----
3220	CPSC-CH-C1001-09.3	0.0286	R(0.01)	-5.02	8009		-----	-----
3225	CPSC-CH-C1001-09.3	0.062		-0.50	8020	JTSS ST 2012	N.A.	-----
3228	CPSC-CH-C1001-09.3	N.D.		-----				

normality OK
n 86
outliers 8
mean (n) 0.0657
st.dev. (n) 0.00775
R(calc.) 0.0217
R(ISO14389:14) 0.0207

Compare R(Horwitz) = 0.0111

- Lab 2132: result withdrawn, reported n.d..
Lab 2165: first reported n.d.
Lab 2379: first reported 0.107
Lab 2384: first reported 0.1086
Lab 2389: first reported 0.57442
Lab 2488: first reported n.d.
Lab 2497: result withdrawn, reported 0.0001
Lab 3248: first reported n.d.



Determination of BBP – Benzylbutylphthalate on sample #16561; results in %M/M

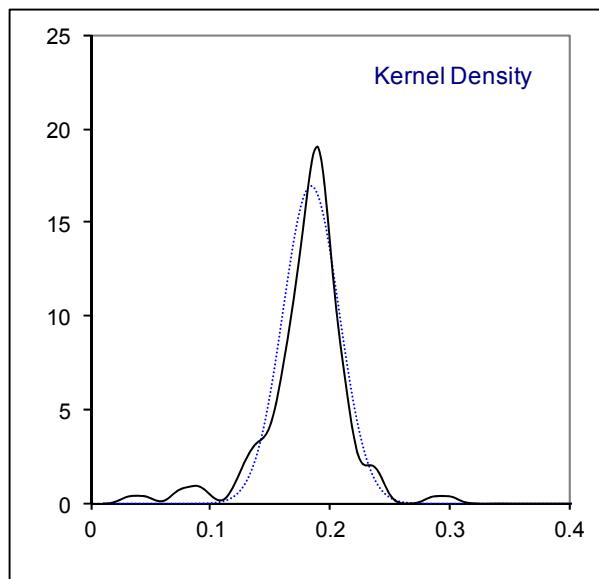
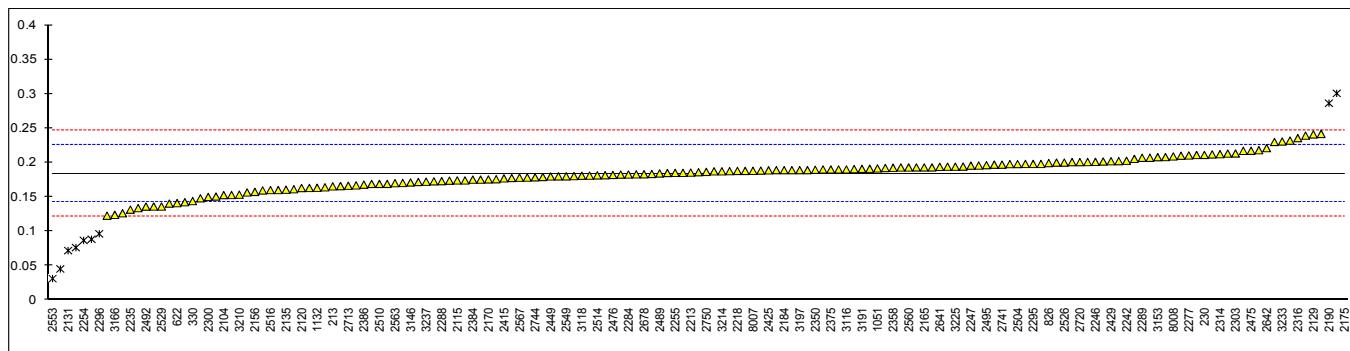
lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
213	CPSC-CH-C1001-09.3	0.1654		-0.90	2386	ISO14389	0.1679		-0.78
230	ISO14389	0.2111		1.31	2389	CPSC-CH-C1001-09.3	0.182875		-0.05
330	In house	0.144		-1.93	2390	ISO14389	0.169		-0.73
339	In house	0.1631		-1.01	2401	GB/T22048	0.3007	R(0.05)	5.64
348	In house	0.0884	C,R(0.05)	-4.62	2410	CPSC-CH-C1001-09.3	0.1879		0.19
362	In house	0.2417		2.79	2413	In house	0.190		0.29
551	In house	0.20		0.77	2415	In house	0.177		-0.34
622	EN14372	0.1410		-2.08	2425	ISO14389	0.1887		0.23
623	CPSC-CH-C1001-09.3	0.211		1.30	2426	CPSC-CH-C1001-09.3	0.1816		-0.12
826	EN14372	0.1993		0.74	2429	CPSC-CH-C1001-09.3	0.2019		0.86
840	CPSC-CH-C1001-09.3	0.1565		-1.33	2431	CPSC-CH-C1001-09.3	0.1929		0.43
1051	EN14372	0.1915		0.36	2432	CPSC-CH-C1001-09.3	0.1834		-0.03
1132	In house	0.1633		-1.00	2433	CPSC-CH-C1001-09.3	0.04521	R(0.01)	-6.70
1170	CPSC-CH-C1001-09.3	0.189	C	0.24	2442	In house	0.2054		1.03
2104	CPSC-CH-C1001-09.3	0.1527	C	-1.51	2449	CPSC-CH-C1001-09.3	0.1798		-0.20
2115	CPSC-CH-C1001-09.3	0.174		-0.48	2452	CPSC-CH-C1001-09.3	0.174		-0.48
2120	CPSC-CH-C1001-09.3	0.163		-1.01	2453	CPSC-CH-C1001-09.3	0.208		1.16
2121	ISO14389	0.1337		-2.43	2459	ISO14389	0.1921		0.39
2129	ISO14389	0.241		2.75	2460	CPSC-CH-C1001-09.3	0.1776		-0.31
2131	In house	0.0719	R(0.05)	-5.42	2467	CPSC-CH-C1001-09.3	0.2320		2.32
2132	CPSC-CH-C1001-09.3	0.1980		0.68	2475	In house	0.2172		1.60
2135	ISO14389	0.1605		-1.14	2476	CPSC-CH-C1001-09.3	0.1820		-0.10
2138	In house	0.1424		-2.01	2488	In house	0.1227		-2.96
2139	CPSC-CH-C1001-09.3	0.1850		0.05	2489	EN14372	0.1842		0.01
2156	CPSC-CH-C1001-09.3	0.1574		-1.29	2492	In house	0.136	C	-2.32
2159	In house	0.1668		-0.83	2495	CPSC-CH-C1001-09.3	0.19623		0.59
2165	CPSC-CH-C1001-09.3	0.193		0.43	2497	CPSC-CH-C1001-09.3	0.1860		0.10
2170	CPSC-CH-C1001-09.3	0.1755		-0.41	2500	CPSC-CH-C1001-09.3	0.17822		-0.28
2175	EPA3550C/8270D	0.9044	R(0.01)	34.80	2504	CPSC-CH-C1001-09.3	0.1979		0.67
2184	CPSC-CH-C1001-09.3	0.189		0.24	2508	ISO14389	0.18		-0.19
2190	ISO8124-6	0.2864	R(0.05)	4.95	2510	In house	0.169		-0.73
2213	CPSC-CH-C1001-09.3	0.1854		0.07	2511	CPSC-CH-C1001-09.3	0.193		0.43
2218	CPSC-CH-C1001-09.3	0.1879		0.19	2514	ISO14389	0.1814		-0.13
2222	In house	0.197		0.63	2516	CPSC-CH-C1001-09.3	0.1600		-1.16
2223	In house	0.1848		0.04	2526	ISO14389	0.20		0.77
2232	----	----		----	2529	CPSC-CH-C1001-09.3	0.1361		-2.31
2235	ISO-TS16181	0.13155		-2.53	2532	CPSC-CH-C1001-09.3	0.1758		-0.40
2236	CPSC-CH-C1001-09.3	0.1752		-0.43	2549	CPSC-CH-C1001-09.3	0.18		-0.19
2237	In house	0.1942		0.49	2553	In house	0.0312	R(0.01)	-7.38
2241	CPSC-CH-C1001-09.3	0.1873		0.16	2557	CPSC-CH-C1001-09.3	0.2171		1.60
2242	CPSC-CH-C1001-09.3	0.2027		0.90	2560	ISO14389	0.1929		0.43
2246	CPSC-CH-C1001-09.3	0.201		0.82	2563	ISO14389	0.17		-0.68
2247	EN14372	0.1955		0.55	2567	CPSC-CH-C1001-09.3	0.178		-0.29
2254	CPSC-CH-C1001-09.3	0.08682	R(0.05)	-4.69	2569	CPSC-CH-C1001-09.3	0.169		-0.73
2255	ISO14389	0.1850		0.05	2572	CPSC-CH-C1001-09.3	0.2021		0.87
2256	CPSC-CH-C1001-09.3	0.164		-0.97	2590	CPSC-CH-C1001-09.3	0.1612		-1.10
2258	CPSC-CH-C1001-09.3	0.14804		-1.74	2591	CPSC-CH-C1001-09.3	0.2392		2.67
2271	CPSC-CH-C1001-09.3	0.1978		0.67	2629	CPSC-CH-C1001-09.3	0.13606		-2.32
2277	CPSC-CH-C1001-09.3	0.210375	C	1.27	2641	CPSC-CH-C1001-09.3	0.1938		0.47
2284	CPSC-CH-C1001-09.3	0.1826		-0.07	2642	CPSC-CH-C1001-09.3	0.221		1.79
2288	CPSC-CH-C1001-09.3	0.173		-0.53	2668	ISO14389	0.1718		-0.59
2289	ISO14389	0.207		1.11	2674	CPSC-CH-C1001-09.3	0.190		0.29
2290	CPSC-CH-C1001-09.3	0.2007		0.81	2678	CPSC-CH-C1001-09.3	0.183		-0.05
2293	CPSC-CH-C1001-09.3	0.2008		0.81	2708	----	----		----
2295	CPSC-CH-C1001-09.3	0.1980		0.68	2713	CPSC-CH-C1001-09.3	0.1663		-0.86
2296	CPSC-CH-C1001-09.3	0.096417	R(0.05)	-4.23	2719	CPSC-CH-C1001-09.3	0.1703		-0.66
2297	CPSC-CH-C1001-09.3	0.1825		-0.07	2720	CPSC-CH-C1001-09.3	0.2007		0.81
2300	ISO14389	0.15		-1.64	2736	CPSC-CH-C1001-09.3	0.1528		-1.51
2303	CPSC-CH-C1001-09.3	0.2132	C	1.41	2737	CPSC-CH-C1001-09.3	0.1600		-1.16
2309	CPSC-CH-C1001-09.3	0.23		2.22	2741	CPSC-CH-C1001-09.3	0.197		0.63
2310	CPSC-CH-C1001-09.3	0.2100		1.26	2744	CPSC-CH-C1001-09.3	0.1785		-0.27
2311	CPSC-CH-C1001-09.3	0.2119		1.35	2750	CPSC-CH-C1001-09.3	0.1865		0.12
2313	CPSC-CH-C1001-09.3	0.2131		1.41	2751	CPSC-CH-C1001-09.3	0.1883		0.21
2314	CPSC-CH-C1001-09.3	0.2122		1.36	3110	ST Part 3	0.194		0.48
2316	CPSC-CH-C1001-09.3	0.2356		2.49	3116	EN14372	0.190		0.29
2320	EN14372	0.1263		-2.79	3117	EN14372	0.1595		-1.18
2330	CPSC-CH-C1001-09.3	0.218		1.64	3118	CPSC-CH-C1001-09.3	0.1809		-0.15
2350	EN14372	0.18952		0.27	3146	CPSC-CH-C1001-09.3	0.1711		-0.62
2353	EN14372	0.1875		0.17	3150	ISO14389	0.1906		0.32
2358	CPSC-CH-C1001-09.3	0.1924		0.41	3151	ISO14389	0.1727		-0.55
2375	CPSC-CH-C1001-09.3	0.190		0.29	3153	CPSC-CH-C1001-09.3	0.2079		1.15
2379	EN14372	0.193		0.43	3154	----	----		----
2380	In house	0.1658		-0.88	3163	In house	0.0763	R(0.05)	-5.20
2384	CPSC-CH-C1001-09.3	0.1752	C	-0.43	3166	In house	0.124		-2.90

3172	ISO14389	0.189	0.24	3233	In house	0.2307	2.26
3176	EN14372	0.1737	-0.50	3237	In house	0.1722	-0.57
3182	CPSC-CH-C1001-09.3	0.181	-0.15	3238	-----	-----	-----
3191	GB/T22048	0.1909	0.33	3239	INH-134	0.140323	-2.11
3197	CPSC-CH-C1001-09.3	0.189	0.24	3248	In house	0.1957	0.56
3200	CPSC-CH-C1001-09.3	0.2016	0.85	8005	GB22048	0.189	0.24
3210	In house	0.1533	-1.48	8006	JTSS ST 2012	0.191	0.34
3213	KS-M1991	0.1803	-0.18	8007	CPSC-CH-C1001-09.3	0.188	0.19
3214	CPSC-CH-C1001-09.3	0.1873	0.16	8008	CPSC-CH-C1001-09.3	0.209	1.21
3220	CPSC-CH-C1001-09.3	0.1506	-1.61	8009	EN14372	0.198	0.68
3225	CPSC-CH-C1001-09.3	0.194	0.48	8020	JTSS ST 2012	0.179	-0.24
3228	CPSC-CH-C1001-09.3	0.207	1.11				

normality OK
 n 157
 outliers 10
 mean (n) 0.1840
 st.dev. (n) 0.02350
 R(calc.) 0.0658
 R(ISO14389:14) 0.0580

Compare R(Horwitz) = 0.0266

Lab 348: first reported N.D.
 Lab 1170: first reported 0.189
 Lab 2104: first reported 0.1018
 Lab 2277: first reported 0.2528
 Lab 2303: first reported 0.2590
 Lab 2384: first reported 0.2656
 Lab 2492: first reported 0.115



Determination of DEHP – Bis-2-ethylhexylphthalate on sample #16561; results in %M/M

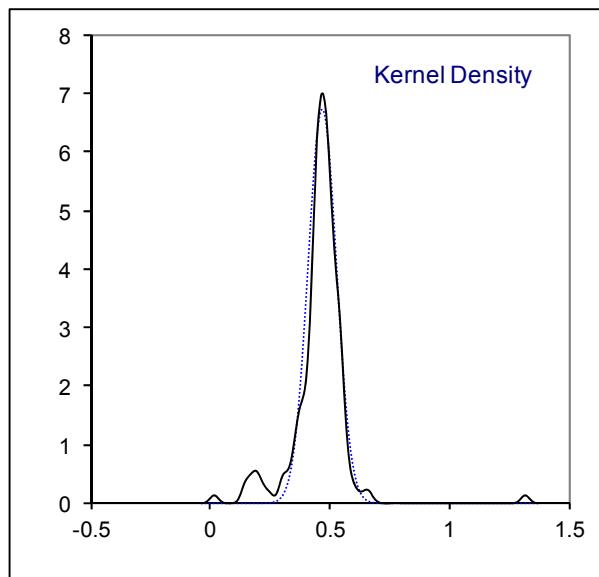
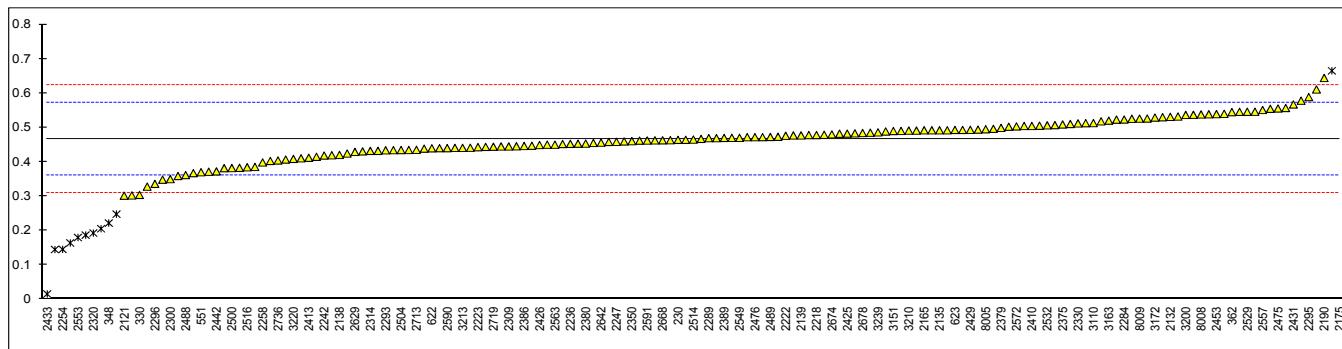
lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
213	CPSC-CH-C1001-09.3	0.4771		0.20	2386	ISO14389	0.4463		-0.39
230	ISO14389	0.4642		-0.05	2389	CPSC-CH-C1001-09.3	0.4697	C	0.06
330	In house	0.304		-3.10	2390	ISO14389	0.473		0.12
339	In house	0.3024		-3.13	2401	GB/T22048	0.5384		1.36
348	In house	0.2220	R(0.05)	-4.66	2410	CPSC-CH-C1001-09.3	0.5046		0.72
362	In house	0.5449		1.49	2413	In house	0.412		-1.04
551	In house	0.37		-1.84	2415	In house	0.523		1.07
622	EN14372	0.4396		-0.52	2425	ISO14389	0.4824		0.30
623	CPSC-CH-C1001-09.3	0.493		0.50	2426	CPSC-CH-C1001-09.3	0.4491		-0.34
826	EN14372	0.4911		0.46	2429	CPSC-CH-C1001-09.3	0.4933		0.51
840	CPSC-CH-C1001-09.3	0.4551		-0.22	2431	CPSC-CH-C1001-09.3	0.5672		1.91
1051	EN14372	0.4581		-0.16	2432	CPSC-CH-C1001-09.3	0.4643		-0.05
1132	In house	0.3713		-1.82	2433	CPSC-CH-C1001-09.3	0.01558	R(0.01)	-8.59
1170	CPSC-CH-C1001-09.3	0.546		1.51	2442	In house	0.3724		-1.80
2104	CPSC-CH-C1001-09.3	0.5262		1.13	2449	CPSC-CH-C1001-09.3	0.4307		-0.69
2115	CPSC-CH-C1001-09.3	0.164	R(0.05)	-5.77	2452	CPSC-CH-C1001-09.3	0.4595		-0.14
2120	CPSC-CH-C1001-09.3	0.54		1.40	2453	CPSC-CH-C1001-09.3	0.539		1.38
2121	ISO14389	0.3016		-3.15	2459	ISO14389	0.4454		-0.41
2129	ISO14389	0.665	R(0.05)	3.78	2460	CPSC-CH-C1001-09.3	0.4322		-0.66
2131	In house	0.2055	R(0.05)	-4.98	2467	CPSC-CH-C1001-09.3	0.3483		-2.26
2132	CPSC-CH-C1001-09.3	0.5310		1.22	2475	In house	0.5554		1.69
2135	ISO14389	0.492		0.48	2476	CPSC-CH-C1001-09.3	0.4720		0.10
2138	In house	0.4203		-0.88	2488	In house	0.3617	C	-2.00
2139	CPSC-CH-C1001-09.3	0.4771		0.20	2489	EN14372	0.4726		0.11
2156	CPSC-CH-C1001-09.3	0.248	C,R(0.05)	-4.17	2492	In house	0.328		-2.64
2159	In house	0.5780		2.12	2495	CPSC-CH-C1001-09.3	0.48852		0.41
2165	CPSC-CH-C1001-09.3	0.492		0.48	2497	CPSC-CH-C1001-09.3	0.5569		1.72
2170	CPSC-CH-C1001-09.3	0.4346		-0.61	2500	CPSC-CH-C1001-09.3	0.38213		-1.61
2175	EPA3550C/8270D	1.3140	R(0.01)	16.14	2504	CPSC-CH-C1001-09.3	0.4345		-0.61
2184	CPSC-CH-C1001-09.3	0.483		0.31	2508	ISO14389	0.45		-0.32
2190	ISO8124-6	0.6441		3.38	2510	In house	0.187	C,R(0.05)	-5.33
2213	CPSC-CH-C1001-09.3	0.5104		0.83	2511	CPSC-CH-C1001-09.3	0.453		-0.26
2218	CPSC-CH-C1001-09.3	0.4781		0.22	2514	ISO14389	0.4650		-0.03
2222	In house	0.476		0.18	2516	CPSC-CH-C1001-09.3	0.3844		-1.57
2223	In house	0.4429		-0.45	2526	ISO14389	0.47		0.06
2232	CPSC-CH-C1001-09.3	0.145	R(0.05)	-6.13	2529	CPSC-CH-C1001-09.3	0.5458		1.51
2235	ISO-TS16181	0.3854		-1.55	2532	CPSC-CH-C1001-09.3	0.5063		0.75
2236	CPSC-CH-C1001-09.3	0.4526		-0.27	2549	CPSC-CH-C1001-09.3	0.47		0.06
2237	In house	0.4385		-0.54	2553	In house	0.18	C,R(0.05)	-5.46
2241	CPSC-CH-C1001-09.3	0.4920		0.48	2557	CPSC-CH-C1001-09.3	0.5510		1.60
2242	CPSC-CH-C1001-09.3	0.4185		-0.92	2560	ISO14389	0.4408		-0.49
2246	CPSC-CH-C1001-09.3	0.532		1.24	2563	ISO14389	0.45		-0.32
2247	EN14372	0.4584		-0.16	2567	CPSC-CH-C1001-09.3	0.44		-0.51
2254	CPSC-CH-C1001-09.3	0.14559	R(0.05)	-6.12	2569	CPSC-CH-C1001-09.3	0.463		-0.07
2255	ISO14389	0.4720		0.10	2572	CPSC-CH-C1001-09.3	0.5033		0.70
2256	CPSC-CH-C1001-09.3	0.359		-2.05	2590	CPSC-CH-C1001-09.3	0.4401		-0.51
2258	CPSC-CH-C1001-09.3	0.39841		-1.30	2591	CPSC-CH-C1001-09.3	0.4622		-0.09
2271	CPSC-CH-C1001-09.3	0.5127		0.88	2629	CPSC-CH-C1001-09.3	0.42901		-0.72
2277	CPSC-CH-C1001-09.3	0.3817		-1.62	2641	CPSC-CH-C1001-09.3	0.4243		-0.81
2284	CPSC-CH-C1001-09.3	0.5233		1.08	2642	CPSC-CH-C1001-09.3	0.456		-0.20
2288	CPSC-CH-C1001-09.3	0.447		-0.38	2668	ISO14389	0.4628		-0.07
2289	ISO14389	0.469		0.04	2674	CPSC-CH-C1001-09.3	0.480		0.25
2290	CPSC-CH-C1001-09.3	0.5045		0.72	2678	CPSC-CH-C1001-09.3	0.484		0.33
2293	CPSC-CH-C1001-09.3	0.4337		-0.63	2708	----	----		----
2295	CPSC-CH-C1001-09.3	0.5886		2.32	2713	CPSC-CH-C1001-09.3	0.4352		-0.60
2296	CPSC-CH-C1001-09.3	0.336155		-2.49	2719	CPSC-CH-C1001-09.3	0.4441		-0.43
2297	CPSC-CH-C1001-09.3	0.5255		1.12	2720	CPSC-CH-C1001-09.3	0.4411		-0.49
2300	ISO14389	0.35		-2.22	2736	CPSC-CH-C1001-09.3	0.4041		-1.19
2303	CPSC-CH-C1001-09.3	0.5546		1.67	2737	CPSC-CH-C1001-09.3	0.537	C	1.34
2309	CPSC-CH-C1001-09.3	0.445		-0.41	2741	CPSC-CH-C1001-09.3	0.482		0.29
2310	CPSC-CH-C1001-09.3	0.4450		-0.41	2744	CPSC-CH-C1001-09.3	0.4194		-0.90
2311	CPSC-CH-C1001-09.3	0.4341		-0.62	2750	CPSC-CH-C1001-09.3	0.3828		-1.60
2313	CPSC-CH-C1001-09.3	0.4618		-0.09	2751	CPSC-CH-C1001-09.3	0.4069		-1.14
2314	CPSC-CH-C1001-09.3	0.4321		-0.66	3110	ST Part 3	0.513		0.88
2316	CPSC-CH-C1001-09.3	0.4437		-0.44	3116	EN14372	0.490		0.44
2320	EN14372	0.19290	C,R(0.05)	-5.22	3117	EN14372	0.3673		-1.89
2330	CPSC-CH-C1001-09.3	0.512		0.86	3118	CPSC-CH-C1001-09.3	0.4104		-1.07
2350	EN14372	0.460354		-0.12	3146	CPSC-CH-C1001-09.3	0.4721		0.10
2353	EN14372	0.5180		0.98	3150	ISO14389	0.4963		0.56
2358	CPSC-CH-C1001-09.3	0.5023		0.68	3151	ISO14389	0.4899		0.44
2375	CPSC-CH-C1001-09.3	0.509		0.80	3153	CPSC-CH-C1001-09.3	0.5300		1.20
2379	EN14372	0.499		0.61	3154	TR16178	0.485		0.35
2380	In house	0.4533		-0.26	3163	In house	0.5200		1.01
2384	CPSC-CH-C1001-09.3	0.4521		-0.28	3166	In house	0.467		0.00

3172	ISO14389	0.529	1.19	3233	In house	0.6108	2.74
3176	EN14372	0.4028	-1.22	3237	In house	0.4149	-0.99
3182	CPSC-CH-C1001-09.3	0.507	0.77	3238	-----	-----	-----
3191	GB/T22048	0.5053	0.73	3239	INH-134	0.485957	0.37
3197	CPSC-CH-C1001-09.3	0.478	0.21	3248	In house	0.5457	1.50
3200	CPSC-CH-C1001-09.3	0.5366	1.33	8005	GB22048	0.495	0.54
3210	In house	0.4910	0.46	8006	JTSS ST 2012	0.493	0.50
3213	KS-M1991	0.4408	-0.49	8007	CPSC-CH-C1001-09.3	0.494	0.52
3214	CPSC-CH-C1001-09.3	0.4626	-0.08	8008	CPSC-CH-C1001-09.3	0.538	1.36
3220	CPSC-CH-C1001-09.3	0.4088	-1.10	8009	EN14372	0.526	1.13
3225	CPSC-CH-C1001-09.3	0.492	0.48	8020	JTSS ST 2012	0.479	0.23
3228	CPSC-CH-C1001-09.3	0.469	0.04				

normality OK
n 157
outliers 12
mean (n) 0.4667
st.dev. (n) 0.05916
R(calc.) 0.1657
R(ISO14389:14) 0.1470

Compare R(Horwitz) = 0.0586

Lab 2156: first reported 0.1716
Lab 2320: first reported 0.2701
Lab 2389: first reported 0.629745
Lab 2488: first reported 0.2965
Lab 2510: first reported 0.632
Lab 2553: first reported 0.2378
Lab 2737: first reported 0.65



Determination of DIDP – Diisodecylphthalate on sample #16561; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
213	CPSC-CH-C1001-09.3	0		----	2386	ISO14389	<0,01		----
230		----		----	2389	CPSC-CH-C1001-09.3	0.023545		----
330	In house	ND		----	2390	ISO14389	0.024		----
339	In house	0.0178		----	2401		----		----
348	In house	n.d.		----	2410		----		----
362	In house	0.2176	C,R(0.01)	----	2413	In house	n.d.		----
551	In house	ND		----	2415	In house	ND		----
622	EN14372	<0.0050		----	2425	ISO14389	ND		----
623	CPSC-CH-C1001-09.3	0.019		----	2426		----		----
826		----		----	2429	CPSC-CH-C1001-09.3	<0.010		----
840	CPSC-CH-C1001-09.3	0.0121		----	2431		----		----
1051	EN14372	<0.005		----	2432		----		----
1132	In house	0.0509	R(0.01)	----	2433		----		----
1170		NA		----	2442		----		----
2104	CPSC-CH-C1001-09.3	< 0.0030		----	2449		----		----
2115	CPSC-CH-C1001-09.3	0.027		----	2452		----		----
2120	CPSC-CH-C1001-09.3	nd		----	2453		----		----
2121		----		----	2459		----		----
2129		----		----	2460	CPSC-CH-C1001-09.3	0		----
2131		----		----	2467		----		----
2132	CPSC-CH-C1001-09.3	ND		----	2475		----		----
2135		----		----	2476	CPSC-CH-C1001-09.3	ND		----
2138	In house	0		----	2488	In house	0.0169		----
2139		----		----	2489	EN14372	0.0121		----
2156	CPSC-CH-C1001-09.3	0.005		----	2492	In house	0.010		----
2159	In house	n.d.		----	2495		----		----
2165	CPSC-CH-C1001-09.3	n.d.		----	2497	CPSC-CH-C1001-09.3	0.0339		----
2170		----		----	2500	CPSC-CH-C1001-09.3	N.D.		----
2175		----		----	2504	CPSC-CH-C1001-09.3	<0.024		----
2184	CPSC-CH-C1001-09.3	N.A.		----	2508		----		----
2190	ISO8124-6	0.0347		----	2510	In house	0.015		----
2213	CPSC-CH-C1001-09.3	<0.005		----	2511		----		----
2218	CPSC-CH-C1001-09.3	0.0227		----	2514		----		----
2222	In house	<0.05		----	2516		----		----
2223		----		----	2526	ISO14389	ND		----
2232		----		----	2529		----		----
2235		----		----	2532	CPSC-CH-C1001-09.3	0.0102		----
2236	CPSC-CH-C1001-09.3	<0.005		----	2549	CPSC-CH-C1001-09.3	0.021		----
2237	In house	0.0141		----	2553		----		----
2241		----		----	2557	CPSC-CH-C1001-09.3	<0.003		----
2242		----		----	2560	ISO14389	<0.005		----
2246	CPSC-CH-C1001-09.3	<0.01		----	2563		----		----
2247		----		----	2567	CPSC-CH-C1001-09.3	ND		----
2254	CPSC-CH-C1001-09.3	<0.010		----	2569	CPSC-CH-C1001-09.3	0.013		----
2255	ISO14389	nd		----	2572	CPSC-CH-C1001-09.3	<0.01		----
2256		----		----	2590	CPSC-CH-C1001-09.3	< L.O.Q.		----
2258	CPSC-CH-C1001-09.3	<0.005		----	2591	CPSC-CH-C1001-09.3	0.0171		----
2271	CPSC-CH-C1001-09.3	0.0159		----	2629		----		----
2277	CPSC-CH-C1001-09.3	<0.026		----	2641	CPSC-CH-C1001-09.3	nd	C	----
2284	CPSC-CH-C1001-09.3	0.0188		----	2642	CPSC-CH-C1001-09.3	<0.03		----
2288	CPSC-CH-C1001-09.3	<0.02		----	2668	ISO14389	0.0184		----
2289	ISO14389	ND		----	2674	CPSC-CH-C1001-09.3	n.d.		----
2290	CPSC-CH-C1001-09.3	< 0.01		----	2678	CPSC-CH-C1001-09.3	nd		----
2293		----		----	2708		----		----
2295		----		----	2713	CPSC-CH-C1001-09.3	<0.0050		----
2296	CPSC-CH-C1001-09.3	0.333717	R(0.01)	----	2719	CPSC-CH-C1001-09.3	<0.01		----
2297	CPSC-CH-C1001-09.3	0.0194		----	2720	CPSC-CH-C1001-09.3	ND		----
2300	ISO14389	Nd		----	2736	CPSC-CH-C1001-09.3	<0.033		----
2303	CPSC-CH-C1001-09.3	<0.02		----	2737		----		----
2309	CPSC-CH-C1001-09.3	<0.01		----	2741	CPSC-CH-C1001-09.3	<0.005		----
2310	CPSC-CH-C1001-09.3	n.d.		----	2744		----		----
2311	CPSC-CH-C1001-09.3	n.d.		----	2750		----		----
2313	CPSC-CH-C1001-09.3	n.d.		----	2751		----		----
2314		----		----	3110	ST Part 3	0.018		----
2316	CPSC-CH-C1001-09.3	ND		----	3116	EN14372	ND		----
2320	EN14372	0.01391	C	----	3117		----		----
2330	CPSC-CH-C1001-09.3	0.008		----	3118	CPSC-CH-C1001-09.3	ND		----
2350	EN14372	<0.005		----	3146	CPSC-CH-C1001-09.3	0.02168		----
2353		----		----	3150		----		----
2358		----		----	3151	ISO14389	<0.005		----
2375		----		----	3153		----		----
2379	EN14372	0.00858		----	3154		----		----
2380		----		----	3163		----		----
2384	CPSC-CH-C1001-09.3	<0.003		----	3166	In house	ND		----

3172	ISO14389	< 0.05	----	3233	----	----
3176		----	----	3237	----	----
3182		----	----	3238	----	----
3191	GB/T22048	0.0191	----	3239	----	----
3197	CPSC-CH-C1001-09.3	ND	----	3248	In house	----
3200	CPSC-CH-C1001-09.3	0.0175	----	8005	GB22048	nd
3210		----	----	8006	JTSS ST 2012	ND
3213		----	----	8007	CPSC-CH-C1001-09.3	ND
3214		----	----	8008	CPSC-CH-C1001-09.3	0.018
3220	CPSC-CH-C1001-09.3	ND	----	8009	EN14372	0.013
3225	CPSC-CH-C1001-09.3	0.018	----	8020	JTSS ST 2012	N.A.
3228	CPSC-CH-C1001-09.3	N.D.	----			----

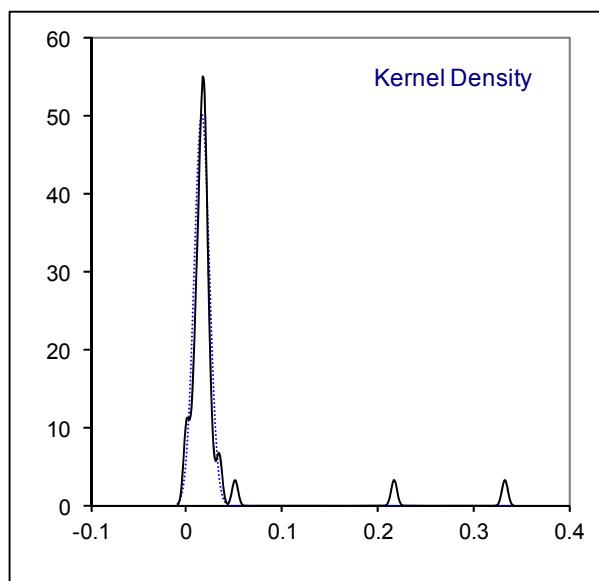
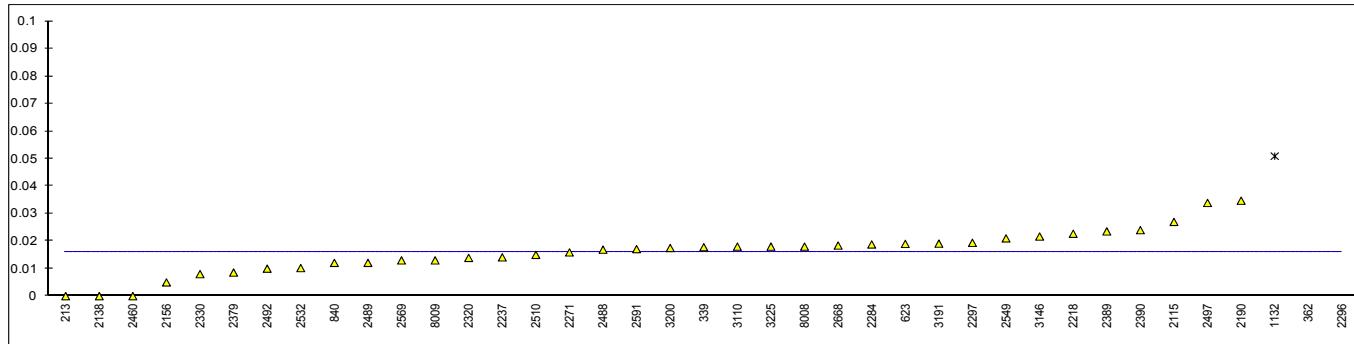
normality n.a.
n 33
outliers 3
mean (n) 0.0175
st.dev. (n) 0.00654
R(calc.) 0.0183
R(ISO14389:14) (0.0055)

Compare R(Horwitz) = (0.0054)

Lab 362: first reported 0.0757

Lab 2320: first reported 0.1504

Lab 2641: first reported 0.05



Determination of DINP – Diisononylphthalate on sample #16561; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
213	CPSC-CH-C1001-09.3	0.3083		1.42	2386	ISO14389	0.2702		0.15
230	ISO14389	0.2593		-0.22	2389	CPSC-CH-C1001-09.3	0.224745		-1.37
330	In house	0.23		-1.20	2390	ISO14389	0.223		-1.43
339	In house	0.2563		-0.32	2401	GB/T22048	0.2873		0.72
348	In house	0.1916		-2.48	2410	CPSC-CH-C1001-09.3	0.2467		-0.64
362	In house	0.8169	C,R(0.01)	18.43	2413	In house	n.d.		-----
551	In house	0.38		3.82	2415	In house	0.297		1.04
622	EN14372	0.2028		-2.11	2425	ISO14389	0.2698		0.13
623	CPSC-CH-C1001-09.3	0.214		-1.73	2426	CPSC-CH-C1001-09.3	0.2737		0.27
826	EN14372	0.2606		-0.17	2429	CPSC-CH-C1001-09.3	0.2327		-1.11
840	CPSC-CH-C1001-09.3	0.2312		-1.16	2431	CPSC-CH-C1001-09.3	0.267		0.04
1051	EN14372	0.2878		0.74	2432	CPSC-CH-C1001-09.3	0.1894		-2.55
1132	In house	0.1648		-3.38	2433	CPSC-CH-C1001-09.3	0.02197	R(0.01)	-8.15
1170		NA		-----	2442	In house	0.2090		-1.90
2104	CPSC-CH-C1001-09.3	0.3125		1.56	2449	CPSC-CH-C1001-09.3	0.2684		0.09
2115	CPSC-CH-C1001-09.3	0.340		2.48	2452	CPSC-CH-C1001-09.3	0.2375		-0.95
2120	CPSC-CH-C1001-09.3	0.32		1.81	2453	CPSC-CH-C1001-09.3	0.385		3.99
2121	ISO14389	0.2309		-1.17	2459	ISO14389	0.2424		-0.78
2129	ISO14389	0.394		4.29	2460	CPSC-CH-C1001-09.3	0.2326		-1.11
2131		----		----	2467	CPSC-CH-C1001-09.3	0.1471		-3.97
2132	CPSC-CH-C1001-09.3	0.2500		-0.53	2475	In house	0.3046		1.30
2135	ISO14389	0.3085		1.43	2476	CPSC-CH-C1001-09.3	0.2645		-0.04
2138	In house	0.2116		-1.81	2488	In house	0.2020		-2.13
2139	CPSC-CH-C1001-09.3	0.2772		0.38	2489	EN14372	0.2303		-1.19
2156	CPSC-CH-C1001-09.3	0.3047		1.30	2492	In house	0.268		0.07
2159	In house	0.2758		0.34	2495	CPSC-CH-C1001-09.3	0.31549		1.66
2165	CPSC-CH-C1001-09.3	0.275		0.31	2497	CPSC-CH-C1001-09.3	1.1570	C,R(0.01)	29.81
2170	CPSC-CH-C1001-09.3	0.2223		-1.45	2500	CPSC-CH-C1001-09.3	0.23441		-1.05
2175		----		----	2504	CPSC-CH-C1001-09.3	0.4916	R(0.01)	7.55
2184	CPSC-CH-C1001-09.3	0.268		0.07	2508		-----		-----
2190	ISO8124-6	0.3947		4.31	2510	In house	0.232		-1.13
2213	CPSC-CH-C1001-09.3	0.319		1.78	2511	CPSC-CH-C1001-09.3	0.275	C	0.31
2218	CPSC-CH-C1001-09.3	0.2365		-0.98	2514	ISO14389	0.2657		0.00
2222	In house	0.329		2.11	2516	CPSC-CH-C1001-09.3	0.2103		-1.86
2223	In house	0.2675		0.06	2526	ISO14389	0.25		-0.53
2232		----		----	2529	CPSC-CH-C1001-09.3	0.2413		-0.82
2235		----		----	2532	CPSC-CH-C1001-09.3	0.2026		-2.11
2236	CPSC-CH-C1001-09.3	0.2344		-1.05	2549	CPSC-CH-C1001-09.3	0.24		-0.86
2237	In house	0.3428		2.58	2553	In house	0.1327		-4.45
2241	CPSC-CH-C1001-09.3	0.2686		0.09	2557	CPSC-CH-C1001-09.3	0.2189	C	-1.57
2242	CPSC-CH-C1001-09.3	0.2513		-0.48	2560	ISO14389	0.2786		0.43
2246	CPSC-CH-C1001-09.3	0.252		-0.46	2563	ISO14389	0.23		-1.20
2247	EN14372	0.2507		-0.50	2567	CPSC-CH-C1001-09.3	0.252		-0.46
2254	EN14372	0.32125		1.86	2569	CPSC-CH-C1001-09.3	0.215		-1.70
2255	ISO14389	0.2650		-0.03	2572	CPSC-CH-C1001-09.3	0.2659		0.00
2256	CPSC-CH-C1001-09.3	0.221		-1.50	2590	CPSC-CH-C1001-09.3	0.2804		0.49
2258	CPSC-CH-C1001-09.3	0.21912	C	-1.56	2591	CPSC-CH-C1001-09.3	0.2997		1.13
2271	CPSC-CH-C1001-09.3	0.2726		0.23	2629	CPSC-CH-C1001-09.3	0.17809		-2.93
2277	CPSC-CH-C1001-09.3	0.3665		3.37	2641	CPSC-CH-C1001-09.3	0.2329		-1.10
2284	CPSC-CH-C1001-09.3	0.289		0.78	2642	CPSC-CH-C1001-09.3	0.302		1.21
2288	CPSC-CH-C1001-09.3	0.239		-0.90	2668	ISO14389	0.2631		-0.09
2289	ISO14389	0.233		-1.10	2674	CPSC-CH-C1001-09.3	0.270		0.14
2290	CPSC-CH-C1001-09.3	0.2641		-0.06	2678	CPSC-CH-C1001-09.3	0.249		-0.56
2293	CPSC-CH-C1001-09.3	0.2538		-0.40	2708		-----		-----
2295	CPSC-CH-C1001-09.3	0.2910		0.84	2713	CPSC-CH-C1001-09.3	0.2338		-1.07
2296		----		----	2719	CPSC-CH-C1001-09.3	0.2370		-0.96
2297	CPSC-CH-C1001-09.3	0.2844		0.62	2720	CPSC-CH-C1001-09.3	0.2547		-0.37
2300	ISO14389	0.24		-0.86	2736	CPSC-CH-C1001-09.3	0.3092		1.45
2303	CPSC-CH-C1001-09.3	0.3874		4.07	2737	CPSC-CH-C1001-09.3	0.3105		1.50
2309	CPSC-CH-C1001-09.3	0.298		1.08	2741	CPSC-CH-C1001-09.3	0.333		2.25
2310	CPSC-CH-C1001-09.3	0.2530		-0.43	2744	CPSC-CH-C1001-09.3	0.3640		3.29
2311	CPSC-CH-C1001-09.3	0.2588		-0.23	2750	CPSC-CH-C1001-09.3	0.3849		3.98
2313	CPSC-CH-C1001-09.3	0.3015		1.19	2751	CPSC-CH-C1001-09.3	0.3772		3.73
2314	CPSC-CH-C1001-09.3	0.2534		-0.41	3110	ST Part 3	0.263		-0.09
2316	CPSC-CH-C1001-09.3	0.3455		2.67	3116	EN14372	0.259		-0.23
2320	EN14372	0.1604		-3.52	3117	EN14372	0.1976		-2.28
2330	CPSC-CH-C1001-09.3	0.281		0.51	3118	CPSC-CH-C1001-09.3	0.2477		-0.60
2350	EN14372	0.277778		0.40	3146	CPSC-CH-C1001-09.3	0.3345		2.30
2353	EN14372	0.2458		-0.67	3150	ISO14389	0.3376		2.40
2358	CPSC-CH-C1001-09.3	0.2578		-0.27	3151	ISO14389	0.2396		-0.88
2375	CPSC-CH-C1001-09.3	0.222		-1.46	3153	CPSC-CH-C1001-09.3	0.2780		0.41
2379	EN14372	0.358		3.08	3154		-----		-----
2380	In house	0.2593		-0.22	3163	In house	0.1834		-2.76
2384	CPSC-CH-C1001-09.3	0.2562		-0.32	3166	In house	0.22		-1.53

3172	ISO14389	0.270		0.14	3233	In house	0.3030	1.24
3176	EN14372	0.5707	R(0.01)	10.20	3237	In house	0.2897	0.80
3182	CPSC-CH-C1001-09.3	0.341		2.52	3238	-----	-----	-----
3191	GB/T22048	0.3145		1.63	3239	INH-134	0.252074	-0.46
3197	CPSC-CH-C1001-09.3	0.2675		0.06	3248	In house	0.2413	-0.82
3200	CPSC-CH-C1001-09.3	0.3199		1.81	8005	GB22048	0.258	-0.26
3210	In house	0.2366		-0.98	8006	JTSS ST 2012	0.254	-0.39
3213		-----		-----	8007	CPSC-CH-C1001-09.3	0.257	-0.29
3214	CPSC-CH-C1001-09.3	0.2809		0.51	8008	CPSC-CH-C1001-09.3	0.272	0.21
3220	CPSC-CH-C1001-09.3	0.1298		-4.55	8009	EN14372	0.263	-0.09
3225	CPSC-CH-C1001-09.3	0.285		0.64	8020	JTSS ST 2012	0.257	-0.29
3228	CPSC-CH-C1001-09.3	0.265		-0.03				

normality OK
n 154
outliers 5
mean (n) 0.2658
st.dev. (n) 0.05015
R(calc.) 0.1404
R(ISO14389:14) 0.0837

Compare R(Horwitz) = 0.0545

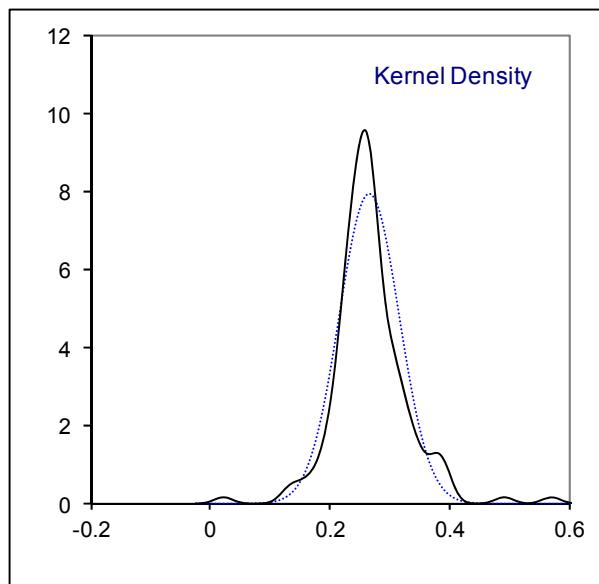
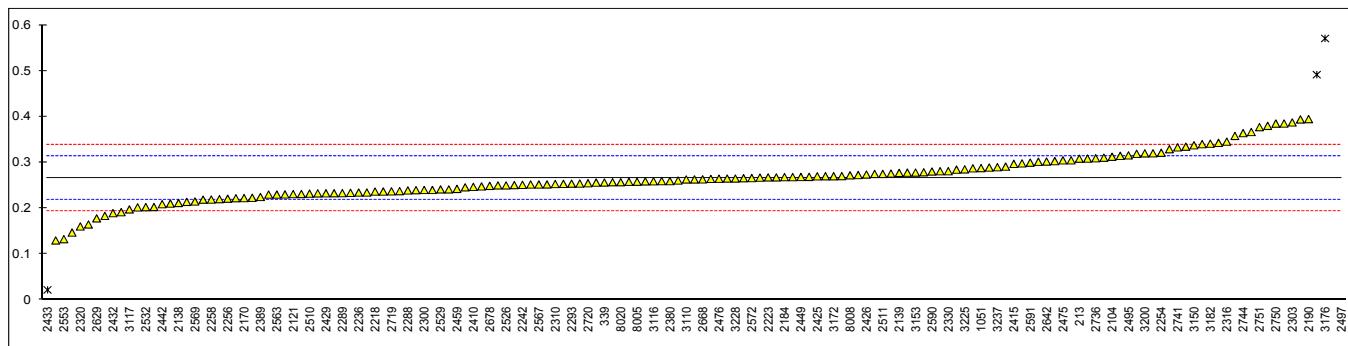
Lab 362: First reported 0.4975

Lab 2258: first reported 0.09486

Lab 2497: first reported 0.8518

Lab 2511: first reported 0.225

Lab 2557: first reported 0.4843



APPENDIX 2

Summary of other reported plasticizers in sample #16560

lab	method
2190	18.3535 %M/M Diisooctylphthalate (CAS No. 27554-26-3)
2232	0.179 %M/M Benzylbutylphthalate; 0.20 %M/M Diisononylphthalate
2297	20.909 %M/M Dioctyl Terephthalate (CAS No. 6422-86-2)
2303	0.21392 %M/M Benzylbutylphthalate
2386	23.75 %M/M Dioctyl Terephthalate (CAS No. 6422-86-2)
2508	0.26 %M/M Diisodecylphthalate
2553	0.16 %M/M Diisononylphthalate
3154	39.94 %M/M Dioctyl Terephthalate (CAS No. 6422-86-2)
3166	4.59 %M/M Di(2-ethylhexyl)terephthalate
3220	0.06 %M/M Diisononylphthalate; 0.0184 %M/M Diisobutylphthalate

Summary of other reported plasticizers in sample #16561

lab	method
362	0.0906 %M/M Di-n-Octylphthalate
2232	0.316 %M/M Dibutylphthalate; 0.168 %M/M D-n-Octylphthalate; 0.069 %M/M Dimethylphthalate
2389	0.27989 %M/M Dibutylphthalate
2467	0.1444 %M/M DnNP, bis-nonylester phthalic acid
2553	0.30 %M/M Dibutylphthalate; 0.15 %M/M Di-n-Octylphthalate; 0.05 %M/M Dimethylphthalate
3154	0.447 %M/M Di-n-Octylphthalate
3220	0.0503 %M/M Dibutylphthalate; 0.7522 %M/M Di-n-Octylphthalate

Summary of not detected phthalates in sample #16560

BBP = Benzylbutylphthalate

DIDP = Diisodecylphthalate

DINP = Diisononylphthalate

DCP = Dicyclohexylphthalate

DEP = Diethylphthalate

DNHP = Di-n-Hexylphthalate

DIBP = Diisobutylphthalate

DPHP = Di-(2-propylheptyl)phthalate

DNPP = Di-n-Pentylphthalate

DUP = Diundecylphthalate

Lab	BBP	DIDP	DINP	DCP	DEP	DNHP	DIBP	DPHP	DNPP	DUP	other
213	0	0	0	0	0	0	0	0	0	0	0
230	----	----	----	----	----	0.00784	----	----	----	----	----
330	ND	ND	ND	----	----	ND	----	----	----	----	----
339	<0.0005	<0.0025	<0.0025	<0.0005	<0.0005	<0.0005	0.0024	----	<0.0005	<0.0005	n.d.
348	n.d.	n.d.	n.d.	n.d.	n.d.						
362	<0.003	<0.005	<0.005	----	<0.003	----	<0.003	----	<0.003	----	----
551	ND	ND	ND	ND	----						
622	<0.0010	<0.0050	<0.0050	----	----	<0.0010	0.0024	----	----	----	----
623	n.d.	n.d.	n.d.	n.d.	n.d.						
826	----	----	----	----	----	----	----	----	----	----	----
840	ND	ND	ND	ND	ND						
1051	<0.005	<0.005	<0.005	----	----	----	----	----	----	----	----
1132	n.d.	n.d.	n.d.	----	----	----	----	----	----	----	----
1170	----	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2104	<0.0005	<0.0030	<0.0030	<0.0005	<0.0005	<0.0005	0.004037	----	<0.0005	<0.0030	<0.0050
2115	----	----	----	----	----	0.003	----	----	----	----	----
2120	nd	nd	nd	nd	----	nd	nd	----	nd	nd	----
2121	----	----	----	----	----	----	----	----	----	----	----
2129	----	----	----	----	----	----	----	----	----	----	----
2131	----	----	----	----	----	----	----	----	----	----	----
2132	ND	ND	ND	----	----	----	----	----	----	----	----
2135	----	----	----	----	----	----	----	----	----	----	----
2138	0	0	0	0	0	0	0	0	0	0	0
2139	----	----	----	----	----	----	----	----	----	----	----
2156	0.005	0.005	0.005	0.005	0.005	0.005	0.005	----	0.005	----	----
2159	n.d.	n.d.	n.d.	n.d.	----						
2165	n.d.	n.d.	n.d.	n.d.	n.d.						
2170	----	----	----	----	----	----	----	----	----	----	----
2175	<0.0025	----	----	<0.0025	----	<0.0025	----	----	----	----	----
2184	N.A.	N.A.	N.A.	N.A.	N.A.						
2190	<0.01	<0.01	<0.01	NP	NP	<0.01	<0.01	NP	<0.01	<0.01	18.3535
2213	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2218	----	----	----	----	----	----	----	----	----	----	----
2222	<0.01	<0.05	<0.05	----	----	----	----	----	----	----	----
2223	----	----	----	----	----	0.0031	----	----	----	----	----
2232	0.179	0.200	0.200	----	----	----	----	----	----	----	----
2235	----	----	----	----	----	----	----	----	----	----	----
2236	<0.005	<0.005	<0.005	----	<0.005	<0.005	<0.005	----	----	----	----
2237	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	----	----
2241	----	----	----	----	----	----	----	----	----	----	----
2242	----	----	----	----	----	----	----	----	----	----	----
2246	<0.01	<0.01	<0.01	----	----	----	----	----	----	----	----
2247	----	----	----	----	----	----	----	----	----	----	----
2254	<0.004	<0.010	<0.010	<0.004	<0.004	<0.004	<0.004	----	<0.004	----	----
2255	nd	nd	nd	nd	nd						
2256	----	----	----	----	----	----	----	----	----	----	----
2258	<0.005	<0.005	<0.005	----	<0.005	<0.005	<0.005	----	----	----	----
2271	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2277	<0.006	<0.026	<0.024	----	<0.006	<0.007	----	----	----	----	----
2284	----	----	----	----	----	----	----	----	----	----	----
2288	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	----	<0.01	----	----
2289	ND	ND	ND	ND	ND						
2290	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2293	----	ND	----	----	----	----	----	----	----	----	----
2295	----	----	----	----	----	----	----	----	----	----	----
2296	----	----	----	----	----	----	----	----	----	----	----
2297	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	20.909
2300	nd	nd	nd	nd	nd	0.001	nd	nd	nd	nd	----
2303	0.21392	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	N/A
2309	<0.005	<0.01	<0.01	----	----	<0.005	<0.005	----	----	----	----
2310	n.d.	n.d.	n.d.	n.d.	----						
2311	n.d.	n.d.	n.d.	n.d.	----						
2313	n.d.	n.d.	n.d.	n.d.	----						

2314	----	----	----	----	----	----	----	----	----	----	----	----	----
2316	ND	----	ND	ND	ND	ND	ND						
2320	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	0.01822	N.D.	N.D.	N.D.	N.D.	----	----
2330	<0.003	<0.003	<0.003	----	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	----
2350	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	----	<0.005	----	----	----
2353	----	----	----	----	----	----	----	----	----	----	----	----	----
2358	----	----	----	----	----	----	----	----	----	----	----	----	----
2375	----	----	----	----	----	----	----	----	----	----	----	----	----
2379	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	0.00502	n.d.	n.d.	n.d.	n.d.	----	----
2380	----	----	----	----	----	----	----	----	----	----	----	----	----
2384	<0.003	<0.01	<0.01	<0.003	<0.003	<0.003	<0.003	----	<0.003	<0.003	<0.003	<0.003	----
2386	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	23.75
2389	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.							
2390	ND	ND	ND	ND	ND	ND	0.006	ND	ND	ND	ND	ND	----
2401	----	----	----	----	----	----	----	----	----	----	----	----	----
2410	----	----	----	----	----	----	----	----	----	----	----	----	----
2413	n.d.	n.d.	n.d.	----	----	n.d.	n.d.	----	----	----	----	----	----
2415	ND	ND	ND	ND	ND	ND							
2425	ND	ND	ND	ND	ND	ND							
2426	----	----	----	----	----	----	----	----	----	----	----	----	----
2429	<0.010	<0.010	<0.010	--	<0.010	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	--
2431	----	----	----	----	----	----	----	----	----	----	----	----	----
2432	----	----	----	----	----	----	----	----	----	----	----	----	----
2433	----	----	----	----	----	----	----	----	----	----	----	----	----
2442	----	----	----	----	----	----	----	----	----	----	----	----	----
2449	----	----	----	----	----	----	----	----	----	----	----	----	----
2452	----	----	----	----	----	----	----	----	----	----	----	----	----
2453	----	----	----	----	----	----	----	----	----	----	----	----	----
2459	----	----	----	----	----	----	----	----	----	----	----	----	----
2460	0	0	0	----	----	----	----	----	----	----	----	----	----
2467	----	----	----	----	----	----	----	----	----	----	----	----	----
2475	----	----	----	----	----	----	----	----	----	----	----	----	----
2476	ND	ND	ND	ND	ND	ND							
2488	nd	nd	nd	nd	nd	nd							
2489	ND	ND	ND	ND	ND	ND							
2492	----	----	----	----	----	----	----	----	----	----	----	----	----
2495	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	----
2497	0.00001	0.0001	----	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	----
2500	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.							
2504	<0.006	<0.024	<0.024	<0.006	<0.006	<0.006	<0.006	<0.006	n.a.	<0.006	n.a.	n.a.	n.a.
2508	0.26	----	----	----	----	----	----	----	----	----	----	----	----
2510	----	----	----	----	----	----	----	----	----	----	----	----	----
2511	----	----	----	----	----	----	----	----	----	----	----	----	----
2514	----	----	----	----	----	----	----	----	----	----	----	----	----
2516	----	----	----	----	----	----	----	----	----	----	----	----	----
2526	ND	ND	ND	ND	ND	ND							
2529	----	----	----	----	----	----	----	----	----	----	----	----	----
2532	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.							
2549	ND	ND	ND	----	----	----	----	----	----	----	----	----	----
2553	0.15	----	0.16	----	----	----	----	----	----	----	----	----	----
2557	<0.003	<0.003	----	----	----	----	0.0037	----	----	----	----	----	----
2560	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2563	----	----	----	----	----	----	----	----	----	----	----	----	----
2567	ND	ND	ND	--	ND	ND	ND	--	ND	ND	--	--	--
2569	----	----	----	----	----	----	----	----	----	----	----	----	----
2572	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2590	<L.O.Q.	0.006810	<L.O.Q.	<L.O.Q.	<L.O.Q.	<L.O.Q.	----						
2591	<0.005	<0.005	<0.005	----	----	----	----	----	----	----	----	----	----
2629	----	----	----	----	----	----	----	----	----	----	----	----	----
2641	ND	ND	ND	----	----	----	----	----	----	----	----	----	----
2642	<0.03	<0.03	<0.03	----	----	----	----	----	----	----	----	----	----
2668	n.d.	n.d.	n.d.	n.d.	n.d.	----							
2674	n.d.	n.d.	n.d.	N/A	N/A	n.d.	n.d.	N/A	n.d.	N/A	n.d.	N/A	N/A
2678	nd	nd	nd	----	----	----	----	----	----	----	----	----	----
2708	----	----	----	----	----	----	----	----	----	----	----	----	----
2713	<0.0050	<0.0050	<0.0050	----	----	----	<0.0050	----	----	----	----	----	----
2719	<0.01	<0.01	<0.01	----	----	----	----	----	----	----	----	----	----
2720	ND	ND	ND	ND	ND	----							
2736	<0.032	<0.032	<0.032	----	----	<0.032	----	----	----	----	----	----	----
2737	----	----	----	----	----	----	----	----	----	----	----	----	----
2741	<0.005	<0.005	<0.005	----	----	<0.005	<0.005	----	----	----	----	----	----
2744	----	----	----	----	----	----	----	----	----	----	----	----	----
2750	----	----	----	----	----	----	----	----	----	----	----	----	----
2751	----	----	----	----	----	----	----	----	----	----	----	----	----
3110	<0.01	<0.01	<0.01	----	----	----	----	----	----	----	----	----	----
3116	ND	ND	ND	----	----	----	----	----	----	----	----	----	----
3117	----	----	----	----	----	----	0.0054	----	----	----	----	----	----
3118	ND	ND	ND	----	----	ND	ND	----	----	----	----	----	----

3146	----	----	----	----	----	----	----	----	----	----	----	----
3150	----	----	----	----	----	----	0.0029	----	----	----	----	----
3151	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3153	----	----	----	----	----	----	----	----	----	----	----	----
3154	----	----	----	----	----	----	----	----	----	----	39.94	----
3163	----	----	----	----	----	----	0.0070	----	----	----	----	----
3166	ND	ND	ND	----	ND	ND	0.003	----	----	----	4.59	----
3172	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	--
3176	----	----	----	----	----	----	----	----	----	----	----	----
3182	----	----	----	----	----	----	----	----	----	----	----	----
3191	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3197	ND	ND	ND	ND	ND	----						
3200	----	----	----	----	----	----	----	----	----	----	----	----
3210	----	----	----	----	----	----	----	----	----	----	----	----
3213	----	----	----	----	----	----	----	----	----	----	----	----
3214	----	----	----	----	----	----	----	----	----	----	----	----
3220	ND	ND	0.06	NT	ND	ND	0.0184	NT	NT	NT	ND	----
3225	ND	ND	ND	NA	NA	----						
3228	N.D.	N.D.	N.D.	N.D.	N.D.	N.A.						
3233	----	----	----	----	----	----	----	----	----	----	----	----
3237	----	----	----	----	----	----	----	----	----	----	----	----
3238	----	----	----	----	----	----	----	----	----	----	----	----
3239	----	----	----	----	----	----	0.001886	----	----	----	----	----
3248	nd	nd	nd	nd	nd	nd						
8005	ND	ND	ND	----	----	----	----	----	----	----	----	----
8006	ND	ND	ND	----	----	----	----	----	----	----	----	----
8007	ND	ND	ND	----	----	----	----	----	----	----	----	----
8008	<0.01	<0.01	<0.01	----	----	----	----	----	----	----	----	----
8009	<0.01	<0.01	<0.01	----	----	----	----	----	----	----	----	----
8020	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.						

Summary of not detected phthalates in sample #16561

DBP = Dibutylphthalate
 DNOP = Di-n-Octylphthalate
 DCP = Dicyclohexylphthalate
 DEP = Diethylphthalate
 DMP = Dimethylphthalate
 DNHP = Di-n-Hexylphthalate
 DIBP = Diisobutylphthalate
 DPHP = Di(2-propylheptyl)phthalate
 DNPP = Di-n-Pentylphthalate
 DUP = Diundecylphthalate

Lab	DBP	DNOP	DCP	DEP	DMP	DNHP	DIBP	DPHP	DNPP	DUP	other
213	0.0065	0	0	0	0	0	0	0	0	0	0
230	0.00561	----	----	----	----	----	----	----	----	----	----
330	ND	ND	----	----	----	----	ND	----	----	----	----
339	0.0021	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	----	<0.0005	----	----
348	n.d.	n.d.	n.d.	n.d.	n.d.						
362	< 0.003	0.0906	----	< 0.003	< 0.003	----	< 0.003	----	< 0.003	----	----
551	ND	ND	ND	ND	----						
622	0.0025	<0.0010	----	----	----	<0.0010	<0.0010	----	----	----	----
623	n.d.	n.d.	n.d.	n.d.	n.d.						
826	----	----	----	----	----	----	----	----	----	----	----
840	ND	ND	ND	ND	ND						
1051	<0.005	<0.005	----	----	----	----	----	----	----	----	----
1132	n.d.	n.d.	----	----	----	----	----	----	----	----	----
1170	----	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2104	0.003198	< 0.0005	0.002474	< 0.0005	< 0.0005	< 0.0005	0.001254	----	< 0.0005	< 0.0030	< 0.0050
2115	0.002	----	----	----	----	----	----	----	----	----	----
2120	nd	nd	nd	----	----	nd	nd	----	nd	nd	----
2121	----	----	----	----	----	----	----	----	----	----	----
2129	----	----	----	----	----	----	----	----	----	----	----
2131	----	----	----	----	----	----	----	----	----	----	----
2132	ND	ND	na	----	----	----	----	----	----	----	----
2135	0.003615	----	----	----	----	----	----	----	----	----	----
2138	0	0	0	0	0	0	0	0	0	0	0
2139	----	----	----	----	----	----	----	----	----	----	----
2156	0.005	0.005	0.005	0.005	0.005	0.005	0.005	----	0.005	----	----
2159	n.d.	n.d.	n.d.	n.d.	----						
2165	n.d.	n.d.	n.d.	n.d.	n.d.						
2170	----	----	----	----	----	----	----	----	----	----	----
2175	<0.0025	0.0183	----	<0.0025	----	----	<0.0025	----	----	----	----
2184	N.A.	N.A.	N.A.	N.A.	N.A.						
2190	<0.01	<0.01	NP	NP	NP	<0.01	<0.01	NP	<0.01	<0.01	0.0187
2213	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2218	----	----	----	----	----	----	----	----	----	----	----
2222	< 0.01	< 0.01	----	----	----	----	----	----	----	----	----
2223	0.0026	----	----	----	----	----	----	----	----	----	----
2232	0.316	0.168	----	0.069	----	----	----	----	----	----	----
2235	----	----	----	----	----	----	----	----	----	----	----
2236	<0.005	<0.005	----	<0.005	----	<0.005	<0.005	----	----	----	----
2237	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	----	----
2241	----	----	----	----	----	----	----	----	----	----	----
2242	----	----	----	----	----	----	----	----	----	----	----
2246	<0.01	<0.01	----	----	----	----	----	----	----	----	----
2247	----	----	----	----	----	----	----	----	----	----	----
2254	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	----	<0.004	----	----
2255	nd	nd	nd	nd	nd						
2256	----	----	----	----	----	----	----	----	----	----	----
2258	<0.005	<0.005	----	----	----	<0.005	----	----	----	----	----
2271	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2277	<0.005	<0.006	----	----	----	<0.006	<0.007	----	----	----	----
2284	----	----	----	----	----	----	----	----	----	----	----
2288	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	----	<0.01	----	----
2289	ND	ND	ND	ND	ND						
2290	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2293	----	----	----	----	----	----	----	----	----	----	----
2295	----	----	----	----	----	----	----	----	----	----	----
2296	----	----	----	----	----	----	----	----	----	----	----
2297	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2300	0.0009	nd	nd	nd	nd	nd	nd	nd	nd	nd	----
2303	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	N/A
2309	<0.005	<0.005	----	----	----	<0.005	<0.005	----	----	----	----
2310	n.d.	n.d.	n.d.	n.d.	----						
2311	n.d.	n.d.	n.d.	n.d.	n.d.						
2313	n.d.	n.d.	n.d.	n.d.	n.d.						

2314	----	----	----	----	----	----	----	----	----	----	----	----	----
2316	ND	ND											
2320	0.002097	N.D.	U.D.	N.D.	N.D.	N.D.	N.D.	N.D.	U.D.	N.D.	U.D.	-----	-----
2330	0.004	<0.003	----	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	----
2350	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	----	<0.005	----	----	----
2353	----	----	----	----	----	----	----	----	----	----	----	----	----
2358	----	----	----	----	----	----	----	----	----	----	----	----	----
2375	----	----	----	----	----	----	----	----	----	----	----	----	----
2379	0.00402	n.d.	----										
2380	----	----	----	----	----	----	----	----	----	----	----	----	----
2384	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	----	<0.003	<0.003	<0.003	<0.003	----
2386	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
2389	0.27989	----	----	----	----	----	----	----	----	----	----	----	----
2390	ND	----											
2401	----	----	----	----	----	----	----	----	----	----	----	----	----
2410	----	----	----	----	----	----	----	----	----	----	----	----	----
2413	n.d.	n.d.	----	----	----	n.d.	n.d.	----	----	----	----	----	----
2415	ND	ND											
2425	ND	ND											
2426	----	----	----	----	----	----	----	----	----	----	----	----	----
2429	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	--	<0.010	<0.010	--	----	--
2431	----	----	----	----	----	----	----	----	----	----	----	----	----
2432	----	----	----	----	----	----	----	----	----	----	----	----	----
2433	----	----	----	----	----	----	----	----	----	----	----	----	----
2442	----	----	----	----	----	----	----	----	----	----	----	----	----
2449	----	----	----	----	----	----	----	----	----	----	----	----	----
2452	----	----	----	----	----	----	----	----	----	----	----	----	----
2453	0.0064	----	----	----	----	----	----	----	----	----	----	----	----
2459	----	----	----	----	----	----	----	----	----	----	----	----	----
2460	0	0	----	----	----	----	----	----	----	----	----	----	----
2467	----	----	----	----	----	----	----	----	----	----	----	0.1444	----
2475	----	----	----	----	----	----	----	----	----	----	----	----	----
2476	ND	ND											
2488	nd	0.0079	nd	nd									
2489	0.0077	ND	ND										
2492	----	----	----	----	----	----	----	----	----	----	----	----	----
2495	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	----	<0.01	----	----	----
2497	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	----	0.0001	----	----	----
2500	N.D.	N.D.											
2504	<0.006	<0.006	<0.006	<0.006	n.a.	<0.006	0.1	n.a.	<0.006	n.a.	<0.006	n.a.	n.a.
2508	----	----	----	----	----	----	----	----	----	----	----	----	----
2510	----	----	----	----	----	----	----	----	----	----	----	----	----
2511	----	----	----	----	----	----	----	----	----	----	----	----	----
2514	----	----	----	----	----	----	----	----	----	----	----	----	----
2516	----	----	----	----	----	----	----	----	----	----	----	----	----
2526	ND	ND											
2529	----	----	----	----	----	----	----	----	----	----	----	----	----
2532	0.0075	n.d.	n.d.										
2549	ND	ND	----	----	ND	----	----	----	----	----	----	----	----
2553	0.30	0.15	----	----	0.05	----	----	----	----	----	----	----	----
2557	0.0052	0.0064	----	----	----	----	----	<0.003	----	----	----	----	----
2560	0.0079	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2563	----	----	----	----	----	----	----	----	----	----	----	----	----
2567	ND	ND	--	ND	--	ND	ND	--	ND	ND	--	--	--
2569	----	----	----	----	----	----	----	----	----	----	----	----	----
2572	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2590	0.005331	< L.O.Q.	0.005012	< L.O.Q.	< L.O.Q.	< L.O.Q.	< L.O.Q.	----					
2591	<0.005	<0.005	----	----	----	----	----	----	----	----	----	----	----
2629	----	----	----	----	----	----	----	----	----	----	----	----	----
2641	0.0055	ND	----	----	----	----	----	----	----	----	----	----	----
2642	<0.03	<0.03	----	----	----	----	----	----	----	----	----	----	----
2668	n.d.	----											
2674	n.d.	n.d.	N/A	N/A	N/A	n.d.	n.d.	n.d.	N/A	n.d.	N/A	----	N/A
2678	nd	nd	----	----	----	----	----	----	----	----	----	----	----
2708	n.d.	----	----	----	----	----	----	----	----	----	----	----	----
2713	<0.0050	<0.0050	----	----	----	----	<0.0050	----	----	----	----	----	----
2719	<0.01	<0.01	<0.01	----	<0.01	----	----	----	----	----	----	----	----
2720	ND	----											
2736	<0.033	<0.033	----	----	----	<0.033	----	----	----	----	----	----	----
2737	----	----	----	----	----	----	----	----	----	----	----	----	----
2741	0.005	<0.005	----	----	----	<0.005	<0.005	----	----	----	----	----	----
2744	----	----	----	----	----	----	----	----	----	----	----	----	----
2750	----	----	----	----	----	----	----	----	----	----	----	----	----
2751	----	----	----	----	----	----	----	----	----	----	----	----	----
3110	<0.01	<0.01	----	----	----	----	----	----	----	----	----	----	----
3116	ND	ND	----	----	----	----	----	----	----	----	----	----	----
3117	0.0074	----	----	----	----	----	----	----	----	----	----	----	----
3118	ND	ND	----	----	ND	ND	ND	----	----	----	----	----	----

3146	----	----	----	----	----	----	----	----	----	----	----	----	----
3150	0.0018	----	----	----	----	----	----	----	----	----	----	----	----
3151	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3153	----	----	----	----	----	----	----	----	----	----	----	----	----
3154	0.447	----	----	----	----	----	----	----	----	----	----	----	----
3163	0.0085	0.0040	----	----	----	0.0089	----	----	----	----	----	----	----
3166	0.002	ND	----	ND	ND	ND	ND	----	----	----	----	----	----
3172	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	--
3176	----	----	----	----	----	----	----	----	----	----	----	----	----
3182	----	----	----	----	----	----	----	----	----	----	----	----	----
3191	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3197	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	----
3200	----	----	----	----	----	----	----	----	----	----	----	----	----
3210	----	----	----	----	----	----	----	----	----	----	----	----	----
3213	----	----	----	----	----	----	----	----	----	----	----	----	----
3214	----	----	----	----	----	----	----	----	----	----	----	----	----
3220	0.0503	0.7522	NT	ND	ND	ND	ND	NT	NT	NT	NT	ND	----
3225	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	----
3228	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.A.
3233	----	----	----	----	----	----	----	----	----	----	----	----	----
3237	----	----	----	----	----	----	----	----	----	----	----	----	----
3238	----	----	----	----	----	----	----	----	----	----	----	----	----
3239	0.001504	----	----	----	----	----	----	----	----	----	----	----	----
3248	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
8005	ND	ND	----	----	----	----	----	----	----	----	----	----	----
8006	ND	ND	----	----	----	----	----	----	----	----	----	----	----
8007	ND	ND	----	----	----	----	----	----	----	----	----	----	----
8008	<0.01	<0.01	----	----	----	----	----	----	----	----	----	----	----
8009	<0.01	<0.01	----	----	----	----	----	----	----	----	----	----	----
8020	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

APPENDIX 2**Method information as reported by the participating laboratories**

Lab	1. Which analysis method was followed (Name of official method / in house method)?	2. Was the sample grinded or cut prior to analysis or used as received?	3. What was the final estimated particle size before analysis?	3b. How was the final particle size checked?	4. Which technique was used to release/extract the analyte?	5. What solvent (mixture) was used to release the analyte?
213	CPSC-CH-C1001-09.3	Cut	3-5 mm	no check	Ultrasonic	THF / Hexane
230	ISO14389	Cut		NO	Ultrasonic	THF / Hexane
330	In house	as received			Ultrasonic	
339	In house	as received			Soxhlet	DCM/MeOH (50/50)
348	In house	Cut	2mmx2mm		Ultrasonic	THF
362	In house	as received			Ultrasonic	THF
551	In house	Cut			Soxhlet	Diethyl ether
622	EN14372	Cut			Soxhlet	Diethyl ether
623	CPSC-CH-C1001-09.3	Cut	2x2x2mm	Ruler	Ultrasonic	THF / Hexane
826	EN14372	Cut	2x2x2mm	vernier calipers	Soxhlet	DCM / Hexane
840	CPSC-CH-C1001-09.3	Cut		2mm x 2mm	Ultrasonic	THF / Hexane
1051	EN14372	as received			Soxhlet	Diethyl ether
1132	In house	Cut	< 2 mm.	no checked	Ultrasonic	THF
1170	CPSC-CH-C1001-09.3	as received	-	-	Ultrasonic	THF / Hexane
2104	CPSC-CH-C1001-09.3	as received			Extraction	DCM
2115	CPSC-CH-C1001-09.3	as received	0.5 cm		Mech. Shaking	THF/ Hexane
2120	CPSC-CH-C1001-09.3	as received			Ultrasonic	THF
2121	ISO14389	as received			Ultrasonic	THF / Hexane (1/2)
2129	ISO14389	as received		no check	Ultrasonic	THF / Hexane
2131	In house	as received			Ultrasonic	THF / Hexane
2132	CPSC-CH-C1001-09.3	Cut	2 mm x 2 mm	N/A	Ultrasonic	THF
2135	ISO14389	as received	5 mm2	not checked	Ultrasonic	THF / ACN (1/2)
2138	In house	Cut	5 mm	2 mm	Ultrasonic	THF / ACN
2139	CPSC-CH-C1001-09.3	Cut			Ultrasonic	THF
2156	CPSC-CH-C1001-09.3	Cut	<2mm	Sieving	Ultrasonic	DCM
2159	In house	Cut	2 mm x 2 mm	Ruler	Ultrasonic	THF/ ACN
2165	CPSC-CH-C1001-09.3	as received	3mm*3mm	Caliper	Ultrasonic	THF
2170	CPSC-CH-C1001-09.3	Cut	0.18cm x 0.18cm	Ruler	Ultrasonic	THF
2175	EPA3550C/8270D	Cut	NA	NA	Ultrasonic	Hexane / Acetone
2184	CPSC-CH-C1001-09.3	as received	3mm x 3mm	Caliper	Ultrasonic	THF
2190	ISO8124-6	as received	/	/	Soxhlet	DCM
2213	CPSC-CH-C1001-09.3	---			---	
2218	CPSC-CH-C1001-09.3	Cut	2mm X 2mm	caliper	Ultrasonic	THF / Hexane
2222	In house	as received			Dissolved	THF / Isooctane
2223	In house	Cut		not checked	Ultrasonic	Acetone
2232	CPSC-CH-C1001-09.3	Cut	1 mm	VISUAL	Ultrasonic	THF
2235	ISO-TS16181	as received			Ultrasonic	Hexane / Acetone (80/20)
2236	CPSC-CH-C1001-09.3	Cut	2 mm x 2 mm	RULER	Ultrasonic	THF
2237	In house	Cut	<1mm		Ultrasonic	DMF/Toluene (1/4)
2241	CPSC-CH-C1001-09.3	Grinded	1mm till 3mm	Estimation	Ultrasonic	DCM / Hexane
2242	CPSC-CH-C1001-09.3	Cut	<2 mm	Ruler	Dissolved	THF / Hexane
2246	CPSC-CH-C1001-09.3	Cut	2mm X 2mm		Ultrasonic	THF
2247	EN14372	Cut	2 to 3 mm	visually	Soxhlet	Diethyl ether
2254	CPSC-CH-C1001-09.3	Cut	1-2mm	Visual	Mech. Shaking	THF
2255	ISO14389	Cut		NA	Ultrasonic	THF / Hexane
2256	CPSC-CH-C1001-09.3	Cut	3mm*3mm		Ultrasonic	THF / Hexane
2258	CPSC-CH-C1001-09.3	Cut	2 mm x 2 mm	with a Rule	Ultrasonic	THF / ACN (1/2)
2271	CPSC-CH-C1001-09.3	Cut	2mmx2mm		Ultrasonic	THF / Hexane
2277	CPSC-CH-C1001-09.3	Cut	2mm X 2mm	2mm x 2mm	Ultrasonic	DCM
2284	CPSC-CH-C1001-09.3	Cut	3mm*3mm	by ruler	Ultrasonic	THF
2288	CPSC-CH-C1001-09.3	---			---	
2289	ISO14389	Cut	5mm*5mm	Ruler	Ultrasonic	THF / Hexane
2290	CPSC-CH-C1001-09.3	as received			Ultrasonic	
2293	CPSC-CH-C1001-09.3	Cut	14 mm	7 mm	Ultrasonic	THF
2295	CPSC-CH-C1001-09.3	Cut	VISUAL		Ultrasonic	THF / Hexane
2296	CPSC-CH-C1001-09.3	as received	N/A	N/A	Ultrasonic	THF / Hexane
2297	CPSC-CH-C1001-09.3	as received	Dissolved	Visual	Ultrasonic	THF / Hexane
2300	ISO14389	Cut	1mm	Scale	Ultrasonic	THF / Hexane
2303	CPSC-CH-C1001-09.3	Cut	2mm		Ultrasonic	THF / Hexane
2309	CPSC-CH-C1001-09.3	Grinded	250 micron	Sieve	Ultrasonic	THF
2310	CPSC-CH-C1001-09.3	Cut	3mm*3mm	Graph sheet	Ultrasonic	THF / Hexane
2311	CPSC-CH-C1001-09.3	Cut	< 2 mm x 2mm	Graph Sheet	Ultrasonic	THF / Hexane
2313	CPSC-CH-C1001-09.3	Cut	2mmX2mm	scale	Mech. Shaking	THF / Hexane
2314	CPSC-CH-C1001-09.3	Cut	3mmX3mm	Graph sheet	Ultrasonic	THF / Hexane
2316	CPSC-CH-C1001-09.3	Cut	2 mm	scale.	Mech. Shaking	THF / Hexane
2320	EN14372	as received			Soxhlet	Diethyl ether

2330	CPSC-CH-C1001-09.3	Cut	2 x 2 x 2mm	Dissolution	Ultrasonic	THF / Hexane
2350	EN14372	Cut	3*3*3	Cutting	Soxhlet	Hexane
2353	EN14372	Cut	3 x 3 x 2mm		Soxhlet	Diethyl ether
2358	CPSC-CH-C1001-09.3	Cut	2mm x 2mm		Sonification	THF
2375	CPSC-CH-C1001-09.3	as received			Ultrasonic	THF / Hexane
2379	EN14372	Cut	2X2 mm	No	Soxhlet	Diethyether
2380	In house	as received	3 x3mm	Ruler	Ultrasonic	Chloroform
2384	CPSC-CH-C1001-09.3	Cut	<500um	Sieve	Ultrasonic	THF
2386	ISO14389	as received	0,5*0,5cm		Ultrasonic	THF / Hexane
2389	CPSC-CH-C1001-09.3	Cut	2 mm	visually	Ultrasonic	THF / Hexane
2390	ISO14389	Cut	2 X 2mm	Vernier Caliper	Ultrasonic	THF
2401	GB/T22048	Cut	<5 x 5mm	Filter	Soxhlet	DCM
2410	CPSC-CH-C1001-09.3	Grinded	No	-	Ultrasonic	THF / Hexane
2413	In house	as received	NA	NA	Ultrasonic	THF / Hexane
2415	In house	Cut	3 * 3mm	3 mm * 3mm	Ultrasonic	THF
2425	ISO14389	Cut	2-3 mm	--	Ultrasonic	THF / Hexane (1/2)
2426	CPSC-CH-C1001-09.3	---			--	
2429	CPSC-CH-C1001-09.3	Cut	2mm*2mm	2mm*2mm	Ultrasonic	THF / Hexane
2431	CPSC-CH-C1001-09.3	Cut	2mm		Ultrasonic	THF / Hexane
2432	CPSC-CH-C1001-09.3	as received				
2433	CPSC-CH-C1001-09.3	Cut	2 x 2 mm	Ruler	Ultrasonic	THF
2442	In house	Cut			Ultrasonic	THF
2449	CPSC-CH-C1001-09.3	Cut	1mmx1mm	manual	Ultrasonic	THF / ACN
2452	CPSC-CH-C1001-09.3	Cut			Ultrasonic	THF / Hexane
2453	CPSC-CH-C1001-09.3	Cut	< 2 mm		Ultrasonic	THF / Hexane (1/2)
2459	ISO14389	as received	2.5 x 15 mm	Vernier Caliper	Ultrasonic	THF / Hexane
2460	CPSC-CH-C1001-09.3	Cut	1 mm	Vernier	Ultrasonic	THF / Hexane
2467	CPSC-CH-C1001-09.3	as received			Mech. Shaking	THF / Hexane (1:2)
2475	In house	as received			Ultrasonic	Toluene
2476	CPSC-CH-C1001-09.3	as received			Ultrasonic	THF
2488	In house	Cut			Ultrasonic	Acetone/ Hexane / MTBE
2489	EN14372	Cut	2mmx2mm	By visual	Soxhlet	Diethylether
2492	In house	Cut			Ultrasonic	THF
2495	CPSC-CH-C1001-09.3	as received	No		Ultrasonic	THF
2497	CPSC-CH-C1001-09.3	as received			Ultrasonic	THF / Hexane
2500	CPSC-CH-C1001-09.3	Cut	2mmX2mm	Dissolved	Ultrasonic	THF / ACN (1:2)
2504	CPSC-CH-C1001-09.3	Cut	3 mm * 3 mm	Ruler	Ultrasonic	THF / Hexane
2508	ISO14389	as received			Ultrasonic	THF
2510	In house	as received	NA	NA	Mech. Shaking	THF
2511	CPSC-CH-C1001-09.3	Cut		total dissolved	Ultrasonic	THF
2514	ISO14389	Cut	2mmx2mm	NA	Ultrasonic	THF / Hexane
2516	CPSC-CH-C1001-09.3	Cut	< 1mm	eye observ.	Dissolved	THF / Hexane
2526	ISO14389	as received	5mm x 5mm	dissolved	Ultrasonic	THF / Hexane
2529	CPSC-CH-C1001-09.3	Cut	2mm	2mm micropunch	Ultrasonic	THF / Hexane
2532	CPSC-CH-C1001-09.3	Cut	1MM	Graph Sheet	Ultrasonic	THF / Hexane
2549	CPSC-CH-C1001-09.3	Cut	2 mm x 2mm	Vernier Caliper	Ultrasonic	THF / Hexane
2553	In house	Cut	2mm x 2mm	Visually	Ultrasonic	THF
2557	CPSC-CH-C1001-09.3	Cut	2mm	Visually	Mech. Shaking	THF / Hexane
2560	ISO14389	Cut	3. 2mm x 2mm	3. 2mm x 2mm	Ultrasonic	THF / Hexane
2563	ISO14389	Grinded	< 1 x 1 mm	Visual	Ultrasonic	THF
2567	CPSC-CH-C1001-09.3	Cut	2mm X 2mm	--	Ultrasonic	THF / Hexane
2569	CPSC-CH-C1001-09.3	Cut	2mm	Manual	Ultrasonic	THF / Hexane
2572	CPSC-CH-C1001-09.3	as received				
2590	CPSC-CH-C1001-09.3	Cut	< 2mm x 2mm	With caliber	Ultrasonic	THF / Hexane
2591	CPSC-CH-C1001-09.3	Cut	3mm	Visual	Ultrasonic	THF / Hexane
2629	CPSC-CH-C1001-09.3	as received				
2641	CPSC-CH-C1001-09.3	Cut	<2mm	Calliper	Ultrasonic	Cyclohexane
2642	CPSC-CH-C1001-09.3	Cut	2mm		Ultrasonic	THF / Hexane
2668	ISO14389	Cut	1mm	vernier caliper	Ultrasonic	THF / Hexane
2674	CPSC-CH-C1001-09.3	as received	3mm*3mm	caliper	Ultrasonic	THF
2678	CPSC-CH-C1001-09.3	Cut			Mech. Shaking	THF
2708		Cut	3 mm x 3 mm	naked eye	Ultrasonic	THF / Methanol
2713	CPSC-CH-C1001-09.3	Cut	< 2mmx2mm	observation	Ultrasonic	THF / Hexane (1:2)
2719	CPSC-CH-C1001-09.3	Cut	2mm x 2mm		Ultrasonic	THF
2720	CPSC-CH-C1001-09.3	Cut	2mm x 2mm	vernier caliper	Ultrasonic	THF / Hexane
2736	CPSC-CH-C1001-09.3	Cut			Ultrasonic	THF / Hexane; Cyclohexane
2737	CPSC-CH-C1001-09.3	as received			Ultrasonic	THF / Hexane
2741	CPSC-CH-C1001-09.3	Cut	1 mm	Visual	Ultrasonic	THF / Hexane (1:2)
2744	CPSC-CH-C1001-09.3	Cut		Digital Caliper	Ultrasonic	THF / Hexane
2750	CPSC-CH-C1001-09.3	Cut		Digital calliper	Ultrasonic	THF / Hexane
2751	CPSC-CH-C1001-09.3	Cut		Digital calliper	Ultrasonic	THF / Hexane
3110	ST Part 3	Grinded				Acetone / Hexane
3116	EN14372	Cut	2mm X 2mm		Soxhlet	Diethyl ether
3117	EN14372	as received			Soxhlet	Diethyl ether
3118	CPSC-CH-C1001-09.3	Cut	<3 mm	Calliper	Ultrasonic	THF
3146	CPSC-CH-C1001-09.3	Cut	< 2x2 mm		Mech. Shaking	THF / Hexane
3150	ISO14389	Cut	2mm x 2mm	by eye	Ultrasonic	THF
3151	ISO14389	as received	<3 x 3 mm	Ruler	Ultrasonic	THF / ACN

3153	CPSC-CH-C1001-09.3	Cut	<2mm	Ruler	Mech. Shaking	THF
3154	TR16178	as received			Ultrasonic	Hexane / Acetone
3163	In house	Cut	0.4mg		Thermal Desorp.	
3166	In house	as received			Ultrasonic	DCM
3172	ISO14389	as received	-	-	Ultrasonic	THF
3176	EN14372	Cut	< 5 mm	-	Soxhlet	Diethyl ether
3182	CPSC-CH-C1001-09.3	Grinded	<1mm	-	Ultrasonic	THF / Hexane
			2*2mm #16560,		Ultrasonic #16560,	THF sample #16560,
3191	GB/T22048	Cut	5*5mm #16561	Ruler	Soxhlet #16561	DCM #16561
3197	CPSC-CH-C1001-09.3	Cut	<2 mm	Calipers	Ultrasonic	THF / Hexane
3200	CPSC-CH-C1001-09.3	Grinded	<2 mm	Test Sieve	Ultrasonic	THF
3210	In house	as received			Ultrasonic	Acetone / Hexane (1:4)
3213	KS-M1991	Grinded	500 um	SEM	Ultrasonic	THF / Hexane
3214	CPSC-CH-C1001-09.3	Cut	2 mm X 2mm	2 mm X 2mm	Ultrasonic	THF / Hexane (1:2)
3220	CPSC-CH-C1001-09.3	as received			Ultrasonic	THF / Hexane
3225	CPSC-CH-C1001-09.3	Cut	5mm x 5mm	Calliper	Ultrasonic	THF / Hexane
3228	CPSC-CH-C1001-09.3	as received	3mm*3mm	Caliper	Ultrasonic	THF
3233	In house	as received			THF / ACN	
3237	In house	as received			Ultrasonic	THF
3238		---			---	
3239	INH-134	---			---	
3248	In house	Cut	5mm * 5mm		Ultrasonic	THF / ACN (1:2)
8005	GB22048	Cut	5mm X 5mm		Soxhlet	DCM
8006	JTSS ST 2012	Cut	5mm x 5mm		Mech. Shaking	Hexane / Acetone
8007	CPSC-CH-C1001-09.3	Cut	2mm X 2mm		Ultrasonic	THF
8008	CPSC-CH-C1001-09.3	Grinded			Ultrasonic	THF / Hexane
8009	EN14372	Grinded			Soxhlet	diethyl ether / Hexane
8020	JTSS ST 2012	as received	3mm x 3mm	Caliper	Mech. Shaking	Hexane / Acetone

APPENDIX 3**Number of participating laboratories per country**

6 labs in BANGLADESH

1 lab in BRAZIL

1 lab in BULGARIA

2 labs in CAMBODIA

1 lab in DENMARK

1 lab in EGYPT

9 labs in FRANCE

10 labs in GERMANY

2 labs in GUATEMALA

21 labs in HONG KONG

16 labs in INDIA

3 labs in INDONESIA

1 lab in IRELAND

6 labs in ITALY

3 labs in JAPAN

2 labs in MALAYSIA

1 lab in MAURITIUS

2 labs in MEXICO

1 lab in MOROCCO

1 lab in NORWAY

19 labs in P.R. of CHINA

5 labs in PAKISTAN

1 lab in PHILIPPINES

2 labs in PORTUGAL

1 lab in ROMANIA

4 labs in SINGAPORE

7 labs in SOUTH KOREA

2 labs in SPAIN

2 labs in SRI LANKA

2 labs in SWITZERLAND

1 lab in TAIWAN R.O.C.

4 labs in THAILAND

1 lab in THE NETHERLANDS

3 labs in TUNISIA

11 labs in TURKEY

7 labs in U.S.A.

2 labs in UNITED KINGDOM

7 labs in VIETNAM

APPENDIX 4**Abbreviations:**

C	= final result after checking of first reported suspect result
D(0.01)	= outlier in Dixon's outlier test
D(0.05)	= straggler in Dixon's outlier test
G(0.01)	= outlier in Grubbs' outlier test
G(0.05)	= straggler in Grubbs' outlier test
DG(0.01)	= outlier in Double Grubbs' outlier test
DG(0.05)	= straggler in Double Grubbs' outlier test
R(0.01)	= outlier in Rosner' outlier test
R(0.05)	= straggler in Rosner' outlier test
n.a.	= not applicable
n.d.	= not detected
fr	= first reported test result
NA	= not analyzed

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- 25 16 C.F.R. Part 1501 and 16 C.F.R. 1500.50-53
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