



Institute for  
Interlaboratory Studies

## Results of Proficiency Test Total Phthalates in Polymers June 2023

**Organized by:** Institute for Interlaboratory Studies  
Spijkenisse, the Netherlands

**Author:** ing. A. Ouwerkerk  
**Correctors:** ing. R.J. Starink & Mrs. E.R. Montenij-Bos  
**Approved by:** ing. A.S. Noordman-de Neef

**Report:** iis23P63

September 2023

**CONTENTS**

1	INTRODUCTION .....	3
2	SET UP .....	3
2.1	ACCREDITATION.....	3
2.2	PROTOCOL.....	3
2.3	CONFIDENTIALITY STATEMENT .....	4
2.4	SAMPLES .....	4
2.5	ANALYZES .....	4
3	RESULTS .....	5
3.1	STATISTICS .....	5
3.2	GRAPHICS .....	6
3.3	Z-SCORES .....	7
4	EVALUATION .....	7
4.1	EVALUATION PER SAMPLE AND PER COMPONENT .....	8
4.2	PERFORMANCE EVALUATION FOR THE GROUP OF LABORATORIES.....	9
4.3	COMPARISON OF THE PROFICIENCY TEST OF JUNE 2023 WITH PREVIOUS PTS .....	10
4.4	EVALUATION OF THE ANALYTICAL DETAILS.....	11
5	DISCUSSION.....	12
6	CONCLUSION .....	12

## Appendices:

1.	Data, statistical and graphic results .....	13
2.	Summary of other reported Phthalates.....	29
3.	Analytical details .....	41
4.	Number of participants per country.....	45
5.	Abbreviations and literature .....	46

## 1 INTRODUCTION

Phthalates act as softeners and are commonly used as plasticizers in PVC. Phthalates may migrate easily from PVC into the environment. Phthalates appeared to have negative effects on health and the environment and therefore regulations have been set up. The manufacture and import of toys into the EC is regulated by the European Union's Toy Directive 2009/48/EC with in addition the general product safety. The latter is covered by EU directive 1907/2006 (REACH). These regulations govern conditions related to toys intended for children under 36 months of age because this group often suck or chew on toys.

Since 2001 the Institute of Interlaboratory Studies (iis) organizes a proficiency scheme for the determination of Total Phthalates in Polymers every year. During the annual proficiency testing program of 2022/2023 it was decided to continue the proficiency test for the determination of Total Phthalates in Polymers.

In this interlaboratory study 171 laboratories in 35 countries registered for participation, see appendix 4 for the number of participants per country. In this report the results of the Total Phthalates in Polymers proficiency test are presented and discussed. This report is also electronically available through the iis website [www.iisnl.com](http://www.iisnl.com).

## 2 SET UP

The Institute for Interlaboratory Studies (iis) in Spijkenisse, the Netherlands, was the organizer of this proficiency test (PT). Sample analyzes for fit-for-use and homogeneity testing were subcontracted to an ISO/IEC17025 accredited laboratory.

It was decided to send two different polyvinylchloride (PVC) samples of 3 grams each labelled #23610 and #23611 respectively.

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/IEC17043:2010 (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 organization 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 June 2018 (iis-protocol, version 3.5). This protocol is electronically available through the iis website [www.iisnl.com](http://www.iisnl.com), from the FAQ page.

## 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

For the first sample a batch of purple PVC blocks containing Phthalates was obtained from a third-party. After homogenization 200 small plastic bags were filled with approximately 3 grams each and labelled #23610.

The batch for sample #23610 was used in a previous proficiency test on Total Phthalates in Polymers as sample #19546 in iis19P03. Therefore, homogeneity of the subsamples was assumed.

For the second sample a batch of green PVC blocks containing Phthalates was obtained from a third-party. After homogenization 200 small plastic bags were filled with approximately 3 grams each and labelled #23611.

The batch for sample #23611 was used in a previous proficiency test on Total Phthalates in Polymers as sample #18560 in iis18P03. Therefore, homogeneity of the subsamples was assumed.

To each of the participating laboratories two PVC samples labelled #23610 and #23611 were sent on May 24, 2023.

## 2.5 ANALYZES

The participants were requested to determine on both samples #23610 and #23611:

BBP - Benzyl butyl phthalate (CAS No. 85-68-7)

DEHP - Di-(2-ethylhexyl) phthalate (CAS No. 117-81-7)

DBP - Dibutyl phthalate (CAS No. 84-74-2)

DIDP - Di-iso-decyl phthalate (CAS No. 26761-40-0 & 68515-49-1)

DINP - Di-iso-nonyl phthalate (CAS No. 28553-12-0 & 68515-48-0)

DNOP - Di-n-octyl phthalate (CAS No. 117-84-0)

DCHP - Dicyclohexyl phthalate (CAS No. 84-61-7)

DEP - Diethyl phthalate (CAS No. 84-66-2)

DMP - Dimethyl phthalate (CAS No. 131-11-3)

DNHP - Di-n-hexyl phthalate (CAS No. 84-75-3)

DIBP - Di-iso-butyl phthalate (CAS No. 84-69-5)

DNPP - Di-n-pentyl phthalate (CAS No. 131-18-0)

DPrP - Di-n-propyl phthalate (CAS No. 131-16-8)

DMEP - Di-(2-methoxyethyl) phthalate (CAS No. 117-82-8)

Total Other Phthalates

It was also requested to report if the laboratory was accredited for the determined components and to report some analytical details.

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' test results which are above the detection limit, because such test results can not be used for meaningful statistical evaluations.

To get comparable test results a detailed report form and a letter of instructions are prepared. On the report form the reporting units are given as well as the reference test methods (when applicable) that will be used during the evaluation. The detailed report form and the letter of instructions are both made available on the data entry portal [www.kpmd.co.uk/sgs-iis-cts/](http://www.kpmd.co.uk/sgs-iis-cts/). The participating laboratories are also requested to confirm the sample receipt on this data entry portal. The letter of instructions can also be downloaded from the iis website [www.iisnl.com](http://www.iisnl.com).

### 3 RESULTS

During five weeks after sample dispatch, the test results of the individual laboratories were gathered via the data entry portal [www.kpmd.co.uk/sgs-iis-cts/](http://www.kpmd.co.uk/sgs-iis-cts/). The reported test results are tabulated per determination in appendices 1 and 2 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 (no reanalyzes). Additional or corrected test results are used for data analysis and the original test results are placed under 'Remarks' in the result tables in appendices 1 and 2. Test results that came in after the deadline were not taken into account in this screening for suspect data and thus these participants were not requested for checks.

#### 3.1 STATISTICS

The protocol followed in the organization 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 June 2018 (iis-protocol, version 3.5).

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. If a data set does not have a normal distribution, the (results of the) statistical evaluation should be used with due care.

The assigned value is determined by consensus based on the test results of the group of participants after rejection of the statistical outliers and/or suspect data.

According to ISO13528 all (original received or corrected) results per determination were submitted to outlier tests. In the iis procedure for proficiency tests, outliers are detected prior to calculation of the mean, standard deviation and reproducibility. For small data sets, Dixon (up to 20 test results) or Grubbs (up to 40 test results) outlier tests can be used. For larger data sets (above 20 test results) Rosner's outlier test can be used. 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's 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's test. 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. In this PT, the criterion of ISO13528, paragraph 9.2.1 was met for all evaluated tests, therefore, the uncertainty of all assigned values may be negligible and need not be included in the PT report.

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

### 3.2 GRAPHICS

In order to visualize 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 test 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 reference test method. 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 (dotted line) was projected over the Kernel Density Graph (smooth line) for reference. The Gauss curve is calculated from the consensus value and the corresponding standard deviation.

### 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 (derived from e.g. ISO or ASTM test methods), the z-scores were calculated using a target standard deviation. This results in an evaluation independent of the variation in 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, like Horwitz of an estimated reproducibility based on former iis proficiency tests.

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 test result tables in appendix 1.

Absolute values for  $z < 2$  are very common and absolute values for  $z > 3$  are very rare.

Therefore, 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 proficiency test no problems were encountered with the dispatch of the samples. Eleven participants reported test results after the final reporting date and three other participants did not report any test results. Not all participants were able to report all components requested.

In total 168 participants reported 1098 numerical test results. Observed were 32 outlying test results, which is 2.9%. In proficiency tests outlier percentages of 3% - 7.5% are quite normal.

Not all data sets proved to have a normal Gaussian distribution. These are referred to as “not OK” or “suspect”. The statistical evaluation of these data sets should be used with due care, see also paragraph 3.1.

#### 4.1 EVALUATION PER SAMPLE AND PER COMPONENT

In this section the reported test results are discussed per sample and per component. The test methods which were used by the various laboratories were taken into account for explaining the observed differences when possible and applicable. These test methods are also in the tables together with the original data in appendix 1. The abbreviations, used in these tables, are explained in appendix 5.

Test method CPSC-CH-C1001-09.4 is considered to be the official test method for the determination of individual Phthalates in polymer. Regretfully the CPSC test method does not contain any precision statements.

The 2017 version of IEC62321 (Annex L) does mention a variety of precision data for individual Phthalates. There are precision data mentioned for 4 different procedures of quantification in a wide range of reproducibilities.

In 2017 iis decided to use the iis PT data gathered since 2010 to estimate a more realistic target reproducibility. This estimated target reproducibility was calculated from the relative standard deviation of 16% of the mean (see iis memo 1701) multiplied by 2.8. This was used for the evaluation of the test results in this PT.

##### **sample #23610**

DEHP: This determination was not problematic. Three statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.

DIDP: This determination was not problematic. Five statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.

DEP: This determination was not problematic. Five statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.

DIBP: This determination was not problematic. Five statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.

The participants agreed on a concentration near or below the limit of detection for all other Phthalates mentioned in paragraph 2.5. Therefore, no z-scores are calculated for these Phthalates. The reported test results are given in appendix 2.

**sample #23611**

**DBP:** This determination was not problematic. Four statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.

**DNOP:** This determination was not problematic. One statistical outlier was observed. The calculated reproducibility after rejection of the statistical outlier is in agreement with the target reproducibility as derived from iis memo 1701.

**DCHP:** This determination was not problematic. Six statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.

**DNPP:** This determination was not problematic. Three statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.

The participants agreed on a concentration near or below the limit of detection for all other Phthalates mentioned in paragraph 2.5. Therefore, no z-scores are calculated for these Phthalates. The reported test results are given in appendix 2.

**4.2 PERFORMANCE EVALUATION FOR THE GROUP OF LABORATORIES**

A comparison has been made between the reproducibility as declared by the reference method and the reproducibility as found for the group of participating laboratories. The number of significant test results, the average, the calculated reproducibility ( $2.8 \cdot$  standard deviation) and the target reproducibility derived from reference methods are presented in the next tables.

Component	unit	n	average	2.8 * sd	R(target)
DEHP	%M/M	165	0.325	0.098	0.145
DIDP	%M/M	137	0.411	0.161	0.184
DEP	%M/M	103	0.177	0.043	0.079
DIBP	%M/M	155	0.124	0.031	0.055

Table 1: reproducibilities of tests on sample #23610

Component	unit	n	average	2.8 * sd	R(target)
DBP	%M/M	161	0.185	0.058	0.083
DNOP	%M/M	96	0.092	0.045	0.041
DCHP	%M/M	124	0.121	0.036	0.054
DNPP	%M/M	125	0.052	0.013	0.023

Table 2: reproducibilities of tests on sample #23611

Without further statistical calculations it could be concluded that for all Phthalates present in the samples there is a good compliance of the group of participants with the target reproducibility.

#### 4.3 COMPARISON OF THE PROFICIENCY TEST OF JUNE 2023 WITH PREVIOUS PTS

	June 2023	June 2022	May 2021	June 2020	June 2019
Number of reporting laboratories	168	181	178	162	202
Number of test results	1098	1276	1010	1255	1475
Number of statistical outliers	32	43	27	41	47
Percentage of statistical outliers	2.9%	3.4%	2.7%	3.3%	3.2%

Table 3: comparison with previous proficiency tests

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

The performance of the determinations of the proficiency test was compared to uncertainties observed in PTs over the years, expressed as relative standard deviation (RSD) of the PTS, see next table.

Component	June 2023	June 2022	May 2021	June 2020	2019-2006	Target
BBP	--	11%	15%	12%	11 - 25%	16%
DEHP	11%	10 - 14%	12 - 14%	12%	12 - 29%	16%
DBP	11%	8 - 11%	11%	13%	10 - 28%	16%
DIDP	14%	--	14%	20%	15 - 27%	16%
DINP <sup>1)</sup>	--	--	14%	--	12 - 33%	16%
DNOP	18%	15%	--	--	15 - 23%	16%
DCHP	11%	--	--	13%	11 - 16%	16%
DEP	9%	--	--	--	8 - 15%	16%
DMP	--	12%	--	12 - 15%	12-14%	16%
DNHP	--	--	--	--	10 - 17%	16%
DIBP	9%	9%	--	11%	9 - 16%	16%
DNPP	9%	--	--	--	14 - 16%	16%
DPRP	--	--	--	--	12%	16%

Table 4: development of uncertainties over the years

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

The uncertainties observed in this PT are comparable to the uncertainties observed in previous PTs.

Sample #23610 was used in a previous PT as sample #19546 in iis19P03. The averages found in both PTs for this sample are similar. The calculated reproducibility for the components in this sample improved in the 2023 PT compared to the 2019 PT.

Component	unit	sample #23610			sample #19546		
		n	average	R(calc)	n	average	R(calc)
DEHP	mg/kg	165	0.325	0.098	197	0.315	0.131
DIDP	mg/kg	137	0.411	0.161	174	0.398	0.177
DEP	mg/kg	103	0.177	0.043	142	0.174	0.069
DIBP	mg/kg	155	0.124	0.031	181	0.124	0.037

Table 5: comparison of sample #23610 with #19546

Sample #23611 was used in a previous PT as sample #18560 in iis18P03. The averages found in both PTs for this sample are similar. The calculated reproducibility for the components in this sample improved in the 2023 PT compared to the 2018 PT.

Component	unit	sample #23611			sample #18560		
		n	average	R(calc)	n	average	R(calc)
DBP	mg/kg	161	0.185	0.058	183	0.187	0.070
DNOP	mg/kg	96	0.092	0.045	112	0.090	0.048
DCHP	mg/kg	124	0.121	0.036	143	0.124	0.039
DNPP	mg/kg	125	0.052	0.013	149	0.051	0.020

Table 6: comparison of sample #23611 with #18560

#### 4.4 EVALUATION OF THE ANALYTICAL DETAILS

For this PT some analytical details were requested and given in appendix 3. Based on the answers given by the participants the following can be summarized:

- A majority (91%) of the participants mentioned that they are ISO/IEC17025 accredited for the determination of Phthalates in Polymers.
- 56% of the participants reported to have used CPSC-CH-C1001-09.4 as test method, 8% of the participants reported to have used IEC62321-8 and 36% of the participants reported to have used an in-house method or other different test method.
- 40% of the participants used the sample as received, 51% after further cutting the sample and 9% after further grinding.
- 79% of the participants used less than 0.5 grams as sample intake, 11% used 0.5 grams and 10% used more than 0.5 grams as sample intake.
- The majority (83%) of the participants reported to have used THF as extraction solvent.
- 50% of the participants reported 60 minutes for extraction time, 25% 90 minutes or more and 25% have reported 45 minutes or less.
- 44% of the participants reported 60 °C for extraction temperature, 7% above 60 °C, 21% between 40-50 °C, and 28% between roomtemperature and 35 °C.

No further statistical analysis has been performed because the reproducibility targets are met.

## 5 DISCUSSION

Most of the reporting participants were able to detect the Phthalates present in the samples #23610 and #23611.

Quite a number of participants reported numerical test results for DINP in sample #23610 and for DMP in sample #23611. However, the level of these Phthalates is very low and therefore the reproducibility of the group that had reported test values disproportionately large. Therefore, it was decided that no z-scores are calculated for these Phthalates.

Plastic toys are not allowed to contain more than 0.1%M/M of DEHP, DBP, BBP and DIBP as individual or combined or more than 0.1%M/M of DINP, DIDP, and DNOP as individual or combined. When the results of this interlaboratory study were compared to the above regulations, it is noticed that almost all of the reporting laboratories would have rejected both samples #23610 and #23611 for containing too high level of Phthalates.

## 6 CONCLUSION

Although it can be concluded that most of the participants have no problem with the determination on Total Phthalates in Polymers in this PT, each participating laboratory will have to evaluate its performance in this study and decide about any corrective actions if necessary. Therefore, participation on a regular basis in this scheme could be helpful to improve the performance and thus increase of the quality of the analytical results.

## APPENDIX 1

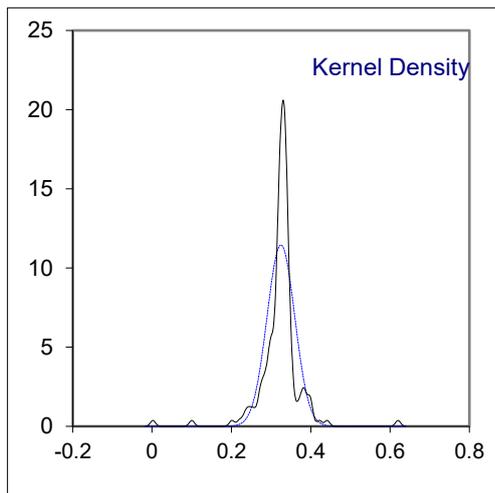
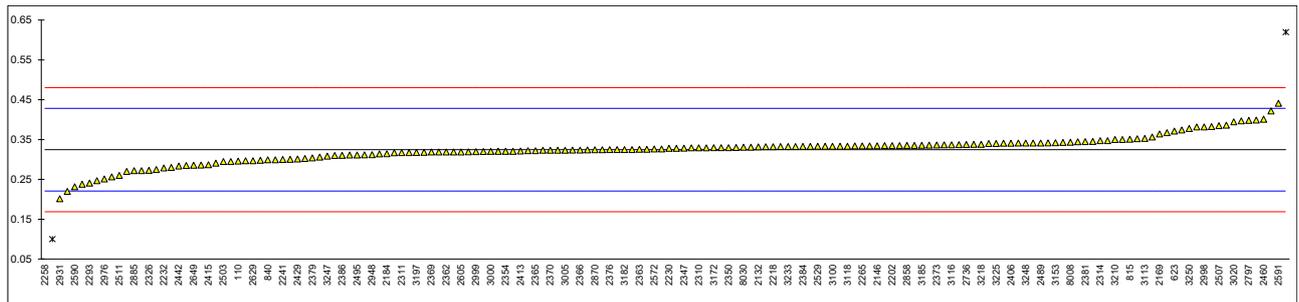
## Determination of DEHP - Di-(2-ethylhexyl) phthalate on sample #23610; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.2960		-0.55	2381	CPSC-CH-C1001-09.4	0.3450		0.39
210	CPSC-CH-C1001-09.4	0.324688		0.00	2384	IEC62321-8	0.3329		0.16
339	In house	0.274617		-0.96	2386	In house	0.3104		-0.27
452	CPSC-CH-C1001-09.4	0.34		0.30	2387	IEC62321-8	0.3191		-0.11
523	CPSC-CH-C1001-09.4	0.238		-1.67	2392	IEC62321-8	0.3411		0.32
551		----		----	2406	CPSC-CH-C1001-09.4	0.3409		0.31
623	In house	0.371		0.89	2413	CPSC-CH-C1001-09.4	0.3212		-0.07
815	IEC62321-8	0.351		0.51	2415	CPSC-CH-C1001-09.4	0.2868		-0.73
826	IEC62321-8	0.3237		-0.02	2420		0.27	C	-1.05
840	CPSC-CH-C1001-09.4	0.299		-0.49	2426	ISO14389	0.280		-0.86
841	CPSC-CH-C1001-09.4	0.295		-0.57	2429	CPSC-CH-C1001-09.4	0.3012		-0.45
1051	GB/T22048	0.3361		0.22	2431	CPSC-CH-C1001-09.3	0.3182		-0.12
1910	ISO8124-6	0.24665	C	-1.50	2442	CPSC-CH-C1001-09.4	0.2836		-0.79
2102	In house	0.317		-0.15	2449	In house	0.329		0.08
2104	CPSC-CH-C1001-09.4	0.3991		1.43	2460	CPSC-CH-C1001-09.4	0.4012		1.47
2115	CPSC-CH-C1001-09.4	0.285		-0.76	2474	ISO8124-6	0.3374		0.25
2132	CPSC-CH-C1001-09.4	0.3316		0.13	2475	In house	0.3406		0.31
2137	KS M1991	0.352		0.53	2476		----		----
2146	CPSC-CH-C1001-09.4	0.3345		0.19	2481	In house	0.6197	R(0.01)	5.68
2156	IEC62321-8	0.3739		0.95	2489	CPSC	0.3411		0.32
2169	IEC62321-8	0.364		0.76	2494	CPSC-CH-C1001-09.4	0.3294		0.09
2170		----		----	2495	CPSC-CH-C1001-09.4	0.3111		-0.26
2176	In house	0.3166		-0.15	2500	CPSC-CH-C1001-09.4	0.325		0.01
2182	CPSC-CH-C1001-09.4	0.3114		-0.25	2503	CPSC-CH-C1001-09.4	0.2947	C	-0.58
2184	CPSC-CH-C1001-09.4	0.3141		-0.20	2507	CPSC-CH-C1001-09.4	0.385		1.16
2201	CPSC-CH-C1001-09.4	0.3333		0.17	2510	In house	0.337		0.24
2202	IEC62321-8	0.3348		0.20	2511	ISO16181-1	0.26		-1.24
2216	CPSC-CH-C1001-09.4	0.35		0.49	2529	CPSC-CH-C1001-09.4	0.33318		0.16
2218	CPSC-CH-C1001-09.4	0.3321		0.14	2532	CPSC-CH-C1001-09.4	0.3448		0.39
2230	In house	0.3280		0.07	2538	In house	0.3319		0.14
2232	CPSC-CH-C1001-09.4	0.279		-0.88	2567	CPSC-CH-C1001-09.4	0.2966		-0.54
2241	ISO8124-6	0.3000		-0.47	2569	CPSC-CH-C1001-09.4	0.31		-0.28
2242	CPSC-CH-C1001-09.4	0.3208		-0.07	2572	CPSC-CH-C1001-09.4	0.3264		0.03
2247	CPSC-CH-C1001-09.4	0.298		-0.51	2573	CPSC-CH-C1001-09.4	0.322		-0.05
2256	In house	0.323		-0.03	2590	CPSC-CH-C1001-09.4	0.23178		-1.79
2258	CPSC-CH-C1001-09.4	0.00201	R(0.01)	-6.21	2591	CPSC-CH-C1001-09.4	0.441		2.24
2264	ISO14389/ GB/T20388	0.2562		-1.32	2605	CPSC-CH-C1001-09.4	0.3190		-0.11
2265	CPSC-CH-C1001-09.4	0.3340		0.18	2629	CPSC-CH-C1001-09.4	0.297		-0.53
2267		0.22		-2.01	2643	KS M1991	0.3201		-0.09
2284	CPSC-CH-C1001-09.4	0.3472		0.43	2649	CPSC-CH-C1001-09.4	0.2857		-0.75
2288	CPSC-CH-C1001-09.3	0.33399		0.18	2678	CPSC-CH-C1001-09.4	0.3006		-0.46
2289	CPSC-CH-C1001-09.4	0.306		-0.36	2689	CPSC-CH-C1001-09.3	0.334		0.18
2290	CPSC-CH-C1001-09.4	0.3325		0.15	2703	CPSC-CH-C1001-09.4	0.338		0.26
2293	CPSC-CH-C1001-09.4	0.2407		-1.62	2720		0.3021		-0.43
2301	CPSC-CH-C1001-09.4	0.3971		1.40	2722	CPSC-CH-C1001-09.4	0.3565		0.61
2310	CPSC-CH-C1001-09.4	0.329		0.08	2736	In house	0.3375		0.25
2311	CPSC-CH-C1001-09.4	0.3170		-0.15	2797	In house	0.39809		1.41
2313	CPSC-CH-C1001-09.4	0.3322		0.15	2821	In house	0.33516241		0.20
2314	CPSC-CH-C1001-09.4	0.3471		0.43	2826	IEC62321-8	0.33		0.10
2316	IEC62321-8	0.33081		0.12	2829	CPSC-CH-C1001-09.4	0.286		-0.74
2326		0.2727	C	-1.00	2835	EPA3545A/8270D	0.299080		-0.49
2330	CPSC-CH-C1001-09.4	0.3347		0.19	2858	In house	0.335		0.20
2347	CPSC-CH-C1001-09.4	0.3284		0.07	2867	CPSC-CH-C1001-09.4	0.3452		0.40
2350	IEC62321-8	0.3298		0.10	2870	In house	0.3246		0.00
2352	CPSC-CH-C1001-09.4	0.3268		0.04	2885	In house	0.272		-1.01
2353	IEC	0.32078		-0.07	2931	In house	0.2011	C	-2.38
2354	CPSC-CH-C1001-09.4	0.3208		-0.07	2943	D8133	0.272		-1.01
2355	IEC62321-8	0.3230		-0.03	2948	CPSC-CH-C1001-09.4	0.312	C	-0.24
2357	CPSC-CH-C1001-09.4	0.3290		0.08	2959	CPSC-CH-C1001-09.4	0.324		-0.01
2361	GB/T22048	0.31892		-0.11	2960	CPSC-CH-C1001-09.4	0.3349		0.20
2362	ISO8124-6	0.31892		-0.11	2976		0.251		-1.42
2363	CPSC-CH-C1001-09.4	0.3257	C	0.02	2977	CPSC-CH-C1001-09.3	0.3418		0.33
2365	CPSC-CH-C1001-09.4	0.3221		-0.05	2998	EN62321-8	0.3819		1.10
2366	CPSC-CH-C1001-09.4	0.3239		-0.01	2999		0.3197		-0.09
2369	CPSC-CH-C1001-09.4	0.3187		-0.11	3000	CPSC-CH-C1001-09.4	0.3202		-0.09
2370	CPSC-CH-C1001-09.4	0.323		-0.03	3005	In house	0.3231		-0.03
2373	CPSC-CH-C1001-09.4	0.3365		0.23	3006	IEC62321-8	0.4215		1.87
2375	CPSC-CH-C1001-09.4	0.319		-0.11	3015	CPSC-CH-C1001-09.4	0.311		-0.26
2376	ST2016	0.32471		0.00	3020	CPSC-CH-C1001-09.4	0.3945	C	1.35
2378	GB/T22048	0.341		0.32	3100	GB/T22048	0.3333		0.17
2379	JSFL336.ST2016-3	0.3042		-0.39	3110	CPSC-CH-C1001-09.4	0.3333		0.17
2380	CPSC-CH-C1001-09.4	0.38164		1.10	3113	GB/T22048	0.3527		0.54

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3116	CPSC-CH-C1001-09.4	0.337		0.24	3210	In house	0.3499		0.49
3118	CPSC-CH-C1001-09.3	0.3334		0.17	3214	CPSC-CH-C1001-09.4	0.36726		0.82
3153	CPSC-CH-C1001-09.4	0.3422		0.34	3218	CPSC-CH-C1001-09.4	0.3380		0.26
3163	CPSC-CH-C1001-09.3	0.1	R(0.01)	-4.32	3225	CPSC-CH-C1001-09.4	0.34		0.30
3166	In house	0.3823		1.11	3233	CPSC-CH-C1001-09.4	0.3322		0.15
3172	ISO8124-6	0.3293		0.09	3237	CPSC-CH-C1001-09.4	0.2908		-0.65
3176	EN14372	0.343		0.35	3246	ISO62321-8	0.3257		0.02
3182	CPSC-CH-C1001-09.4	0.3250		0.01	3247	In house	0.3083		-0.31
3185	CPSC-CH-C1001-09.4	0.3354		0.21	3248	CPSC-CH-C1001-09.4	0.341		0.32
3190	CPSC-CH-C1001-09.4	0.3282		0.07	3250	CPSC-CH-C1001-09.4	0.3779		1.03
3197	ISO8124-6	0.3177		-0.13	8005	ISO8124-6	0.333		0.16
3199	In house	0.386		1.18	8008	JTST2016	0.3431		0.36
3205	In house	0.314		-0.20	8030	CPSC-CH-C1001-09.4	0.3308		0.12
3209	CPSC-CH-C1001-09.4	0.325		0.01					

normality not OK  
 n 165  
 outliers 3  
 mean (n) 0.32462  
 st.dev. (n) 0.034853 RSD = 11%  
 R(calc.) 0.09759  
 st.dev.(iis memo 1701) 0.051939  
 R(iis memo 1701) 0.14543

- Lab 1910 first reported 0.94470
- Lab 2326 first reported 0.4829
- Lab 2363 first reported 3257%M/M
- Lab 2420 first reported 0.22
- Lab 2503 first reported 2947%M/M
- Lab 2931 first reported 0.5583
- Lab 2948 first reported 0.1317
- Lab 3020 first reported 0.2091



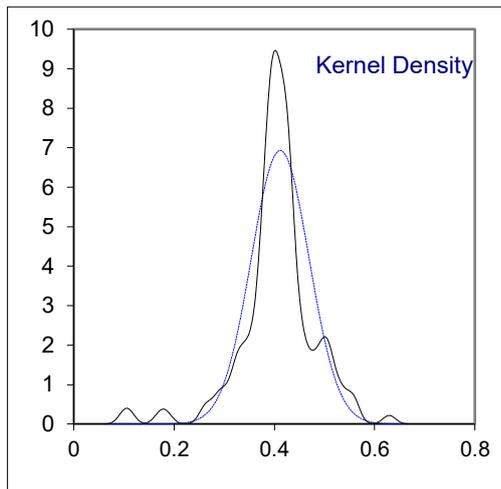
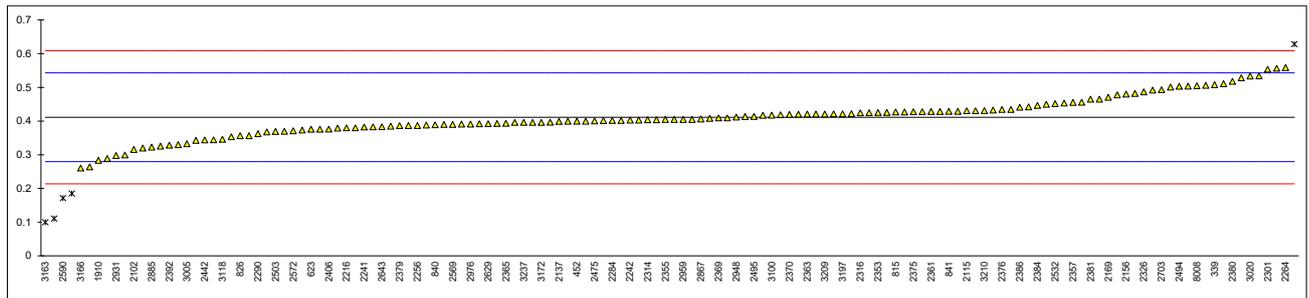
## Determination of DIDP - Di-iso-decyl phthalate on sample #23610; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.3199		-1.39	2381	CPSC-CH-C1001-09.4	0.4650		0.81
210	CPSC-CH-C1001-09.4	0.534102		1.86	2384	IEC62321-8	0.4466		0.53
339	In house	0.507968		1.47	2386	In house	0.441		0.45
452	CPSC-CH-C1001-09.4	0.40		-0.17	2387	IEC62321-8	-----		-----
523	CPSC-CH-C1001-09.4	0.376		-0.54	2392	IEC62321-8	0.3284		-1.26
551	-----	-----		-----	2406	CPSC-CH-C1001-09.4	0.3764		-0.53
623	In house	0.376		-0.54	2413	CPSC-CH-C1001-09.4	Not Det	f-?	-----
815	IEC62321-8	0.427		0.24	2415	CPSC-CH-C1001-09.4	0.4000		-0.17
826	IEC62321-8	0.3565		-0.83	2420	-----	0.39		-0.33
840	CPSC-CH-C1001-09.4	0.389		-0.34	2426	ISO14389	0.478		1.01
841	CPSC-CH-C1001-09.4	0.4293		0.27	2429	CPSC-CH-C1001-09.4	0.4050		-0.10
1051	GB/T22048	0.3828		-0.44	2431	CPSC-CH-C1001-09.3	0.4327		0.32
1910	ISO8124-6	0.28360		-1.94	2442	CPSC-CH-C1001-09.4	0.3441		-1.02
2102	In house	0.316		-1.45	2449	In house	0.506		1.44
2104	CPSC-CH-C1001-09.4	0.6289	R(0.05)	3.30	2460	-----	-----		-----
2115	CPSC-CH-C1001-09.4	0.431		0.30	2474	ISO8124-6	0.4310		0.30
2132	CPSC-CH-C1001-09.4	0.4293		0.27	2475	In house	0.4006		-0.17
2137	KS M1991	0.399		-0.19	2476	-----	-----		-----
2146	CPSC-CH-C1001-09.4	0.4559		0.67	2481	In house	0.4218		0.16
2156	IEC62321-8	0.4802		1.04	2489	CPSC	0.4133		0.03
2169	IEC62321-8	0.471		0.90	2494	CPSC-CH-C1001-09.4	0.5037		1.40
2170	-----	-----		-----	2495	CPSC-CH-C1001-09.4	0.4139		0.04
2176	In house	-----		-----	2500	CPSC-CH-C1001-09.4	0.391		-0.31
2182	CPSC-CH-C1001-09.4	0.392		-0.30	2503	CPSC-CH-C1001-09.4	0.3693	C	-0.64
2184	-----	-----		-----	2507	CPSC-CH-C1001-09.4	0.330		-1.24
2201	CPSC-CH-C1001-09.4	0.4249		0.20	2510	In house	0.289		-1.86
2202	IEC62321-8	0.4170		0.08	2511	In house	0.38		-0.48
2216	CPSC-CH-C1001-09.4	0.38		-0.48	2529	-----	-----		-----
2218	-----	-----		-----	2532	CPSC-CH-C1001-09.4	0.4520		0.62
2230	In house	0.5040		1.41	2538	In house	0.4424		0.47
2232	-----	-----		-----	2567	CPSC-CH-C1001-09.4	0.3792		-0.49
2241	ISO8124-6	0.3826		-0.44	2569	CPSC-CH-C1001-09.4	0.39		-0.33
2242	CPSC-CH-C1001-09.4	0.4030		-0.13	2572	CPSC-CH-C1001-09.4	0.3714		-0.61
2247	CPSC-CH-C1001-09.4	0.427		0.24	2573	CPSC-CH-C1001-09.4	0.421		0.14
2256	In house	0.387		-0.37	2590	CPSC-CH-C1001-09.4	0.17153	C,R(0.05)	-3.64
2258	CPSC-CH-C1001-09.4	not det	f-?	-----	2591	CPSC-CH-C1001-09.4	0.511		1.51
2264	ISO14389/ GB/T20388	0.5588		2.24	2605	CPSC-CH-C1001-09.4	0.3994		-0.18
2265	CPSC-CH-C1001-09.4	0.5569		2.21	2629	CPSC-CH-C1001-09.4	0.3923		-0.29
2267	-----	0.185	R(0.05)	-3.44	2643	KS M1991	0.3832		-0.43
2284	CPSC-CH-C1001-09.4	0.4021		-0.14	2649	CPSC-CH-C1001-09.4	0.3445		-1.02
2288	CPSC-CH-C1001-09.3	-----		-----	2678	-----	-----		-----
2289	CPSC-CH-C1001-09.4	0.403		-0.13	2689	CPSC-CH-C1001-09.3	0.482		1.07
2290	CPSC-CH-C1001-09.4	0.3626		-0.74	2703	CPSC-CH-C1001-09.4	0.493		1.24
2293	CPSC-CH-C1001-09.4	0.2995		-1.70	2720	-----	0.4021		-0.14
2301	CPSC-CH-C1001-09.4	0.5539		2.16	2722	-----	-----		-----
2310	CPSC-CH-C1001-09.4	0.393		-0.28	2736	-----	-----		-----
2311	CPSC-CH-C1001-09.4	0.3970		-0.22	2797	In house	not det	C, f-?	-----
2313	CPSC-CH-C1001-09.4	0.3961		-0.23	2821	In house	0.35661841		-0.83
2314	CPSC-CH-C1001-09.4	0.4039		-0.11	2826	-----	-----		-----
2316	IEC62321-8	0.42462		0.20	2829	CPSC-CH-C1001-09.4	0.343		-1.04
2326	-----	0.4871		1.15	2835	EPA3545A/8270D	0.110706	C,R(0.01)	-4.57
2330	CPSC-CH-C1001-09.4	0.3734		-0.58	2858	In house	0.501		1.36
2347	CPSC-CH-C1001-09.4	0.3850		-0.40	2867	CPSC-CH-C1001-09.4	0.4063		-0.08
2350	IEC62321-8	0.3697		-0.63	2870	In house	0.4346		0.35
2352	CPSC-CH-C1001-09.4	0.4189		0.11	2885	In house	0.323		-1.34
2353	IEC	0.42525		0.21	2931	In house	0.2977		-1.73
2354	CPSC-CH-C1001-09.4	-----		-----	2943	D8133	0.492		1.22
2355	IEC62321-8	0.4050		-0.10	2948	CPSC-CH-C1001-09.4	0.412		0.01
2357	CPSC-CH-C1001-09.4	0.4557		0.67	2959	CPSC-CH-C1001-09.4	0.405		-0.10
2361	GB/T22048	0.42883		0.26	2960	CPSC-CH-C1001-09.4	0.4205		0.14
2362	ISO8124-6	0.428832		0.26	2976	-----	0.391		-0.31
2363	CPSC-CH-C1001-09.4	0.4208	C	0.14	2977	CPSC-CH-C1001-09.3	0.5286		1.78
2365	CPSC-CH-C1001-09.4	0.3935		-0.27	2998	EN62321-8	0.2643		-2.24
2366	CPSC-CH-C1001-09.4	0.3680		-0.66	2999	-----	-----		-----
2369	CPSC-CH-C1001-09.4	0.4094		-0.03	3000	-----	-----		-----
2370	CPSC-CH-C1001-09.4	0.420		0.13	3005	In house	0.3330		-1.19
2373	CPSC-CH-C1001-09.4	0.4081		-0.05	3006	-----	-----		-----
2375	CPSC-CH-C1001-09.4	0.428		0.25	3015	CPSC-CH-C1001-09.4	0.396		-0.23
2376	ST2016	0.434487		0.35	3020	CPSC-CH-C1001-09.4	0.5335	C	1.85
2378	GB/T22048	0.422		0.16	3100	GB/T22048	0.4175		0.09
2379	JSFL336.ST2016-3	0.3868		-0.37	3110	-----	-----		-----
2380	CPSC-CH-C1001-09.4	0.51796		1.62	3113	GB/T22048	0.4280		0.25

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3116		----		----	3210	In house	0.4314		0.30
3118	CPSC-CH-C1001-09.3	0.3461		-0.99	3214	CPSC-CH-C1001-09.4	0.38690		-0.37
3153		----		----	3218	CPSC-CH-C1001-09.4	0.4014		-0.15
3163	CPSC-CH-C1001-09.3	0.1	R(0.01)	-4.73	3225	CPSC-CH-C1001-09.4	-----		-----
3166	In house	0.2608		-2.29	3233	CPSC-CH-C1001-09.4	0.3882		-0.35
3172	ISO8124-6	0.3961		-0.23	3237	CPSC-CH-C1001-09.4	0.396		-0.23
3176	EN14372	0.465		0.81	3246	ISO62321-8	0.4259		0.22
3182	CPSC-CH-C1001-09.4	0.3260		-1.30	3247		----		----
3185		----		----	3248		----		----
3190	CPSC-CH-C1001-09.4	0.4095		-0.03	3250	CPSC-CH-C1001-09.4	0.4535		0.64
3197	ISO8124-6	0.4219		0.16	8005	ISO8124-6	0.404		-0.11
3199	In house	0.450		0.59	8008	JTST2016	0.5049		1.42
3205	In house	0.405		-0.10	8030	CPSC-CH-C1001-09.4	0.3534		-0.88
3209	CPSC-CH-C1001-09.4	0.421		0.14					
normality		OK							
n		137							
outliers		5							
mean (n)		0.41147							
st.dev. (n)		0.057594	RSD = 14%						
R(calc.)		0.16126							
st.dev.(iis memo 1701)		0.065835							
R(iis memo 1701)		0.18434							

**f-? means Possibly a false negative test result?**

- Lab 2363 first reported 4208%M/M
- Lab 2503 first reported 3693%M/M
- Lab 2590 first reported 0.19993
- Lab 2797 first reported 0.00441
- Lab 2835 first reported 0.152389
- Lab 3020 first reported 3.4382



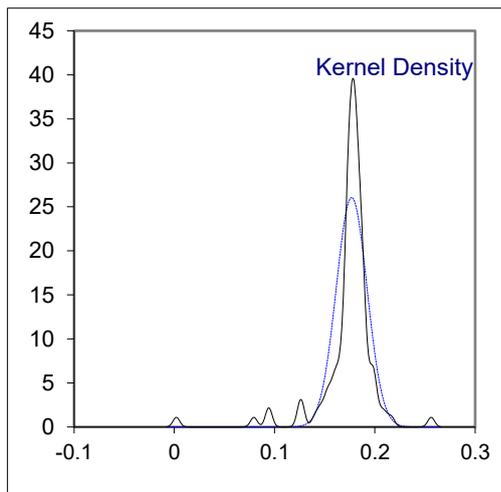
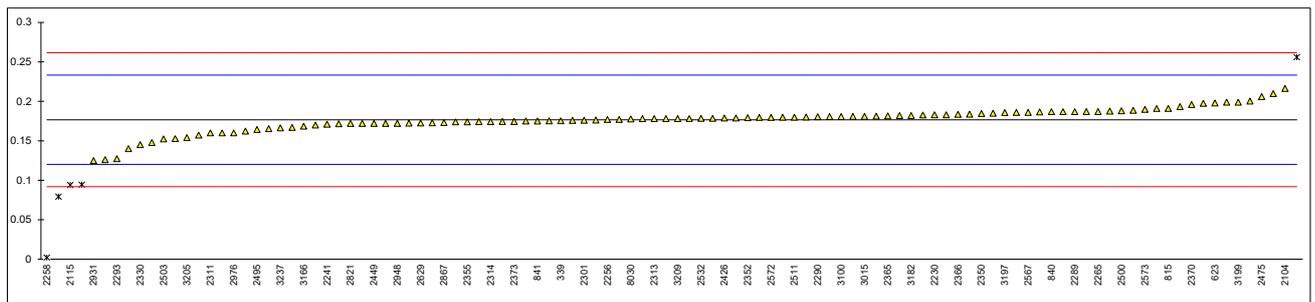
## Determination of DEP - Diethyl phthalate on sample #23610; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	----	C	----	2381	CPSC-CH-C1001-09.4	0.1910		0.50
210	CPSC-CH-C1001-09.4	0.17243		-0.15	2384	IEC62321-8	0.1527		-0.85
339	In house	0.175372		-0.05	2386	In house	0.186		0.33
452		----		----	2387	IEC62321-8	----		----
523	CPSC-CH-C1001-09.4	----		----	2392	IEC62321-8	----		----
551		----		----	2406		----		----
623	In house	0.198		0.75	2413	CPSC-CH-C1001-09.4	Not Det	f-?	----
815	IEC62321-8	0.191		0.50	2415	CPSC-CH-C1001-09.4	0.1743		-0.09
826	IEC62321-8	0.1750		-0.06	2420		0.17		-0.24
840	CPSC-CH-C1001-09.4	0.187		0.36	2426	ISO14389	0.179		0.08
841	CPSC-CH-C1001-09.4	0.175		-0.06	2429	CPSC-CH-C1001-09.4	0.1807		0.14
1051		----		----	2431		----		----
1910		----		----	2442	CPSC-CH-C1001-09.4	0.2004		0.84
2102	In house	----		----	2449	In house	0.172		-0.17
2104	CPSC-CH-C1001-09.4	0.2164		1.40	2460		----		----
2115	CPSC-CH-C1001-09.4	0.094	R(0.01)	-2.93	2474		----		----
2132	CPSC-CH-C1001-09.4	----		----	2475	In house	0.2061		1.04
2137		----		----	2476		----		----
2146		----		----	2481	In house	----		----
2156	IEC62321-8	0.2099		1.17	2489	CPSC	0.1745		-0.08
2169	IEC62321-8	0.199		0.79	2494	CPSC-CH-C1001-09.4	0.1812		0.16
2170		----		----	2495	CPSC-CH-C1001-09.4	0.1645		-0.43
2176	In house	----		----	2500	CPSC-CH-C1001-09.4	0.188		0.40
2182		----		----	2503	CPSC-CH-C1001-09.4	0.1524	C	-0.86
2184		----		----	2507		----		----
2201	CPSC-CH-C1001-09.4	0.1871		0.37	2510	In house	0.172		-0.17
2202	IEC62321-8	----		----	2511	In house	0.18		0.12
2216		----		----	2529		----		----
2218		----		----	2532	CPSC-CH-C1001-09.4	0.1784		0.06
2230	In house	0.1830		0.22	2538		----		----
2232		----		----	2567	CPSC-CH-C1001-09.4	0.1860		0.33
2241	ISO8124-6	0.1710		-0.20	2569	CPSC-CH-C1001-09.4	0.176		-0.03
2242	CPSC-CH-C1001-09.4	----		----	2572	CPSC-CH-C1001-09.4	0.1797		0.10
2247	CPSC-CH-C1001-09.4	0.172		-0.17	2573	CPSC-CH-C1001-09.4	0.190		0.47
2256	In house	0.177		0.01	2590	CPSC-CH-C1001-09.4	0.07937	C,R(0.01)	-3.44
2258	CPSC-CH-C1001-09.4	0.002158	R(0.01)	-6.17	2591	CPSC-CH-C1001-09.4	0.256	R(0.01)	2.80
2264	ISO14389/ GB/T20388	0.1653		-0.40	2605	CPSC-CH-C1001-09.4	0.1764		-0.01
2265	CPSC-CH-C1001-09.4	0.1871		0.37	2629	CPSC-CH-C1001-09.4	0.17257		-0.15
2267		----		----	2643		----		----
2284	CPSC-CH-C1001-09.4	0.1799		0.11	2649	CPSC-CH-C1001-09.4	0.1478		-1.02
2288	CPSC-CH-C1001-09.3	----		----	2678		----		----
2289	CPSC-CH-C1001-09.4	0.187		0.36	2689	CPSC-CH-C1001-09.3	0.167		-0.34
2290	CPSC-CH-C1001-09.4	0.1806		0.14	2703	CPSC-CH-C1001-09.4	0.179		0.08
2293	CPSC-CH-C1001-09.4	0.1274		-1.74	2720		0.1850		0.29
2301	CPSC-CH-C1001-09.4	0.1762		-0.02	2722		----		----
2310	CPSC-CH-C1001-09.4	0.178		0.04	2736		----		----
2311	CPSC-CH-C1001-09.4	0.1600		-0.59	2797	In house	----		----
2313	CPSC-CH-C1001-09.4	0.1780		0.04	2821	In house	0.17199932		-0.17
2314	CPSC-CH-C1001-09.4	0.1744		-0.08	2826		----		----
2316	IEC62321-8	----		----	2829	CPSC-CH-C1001-09.4	0.183		0.22
2326		0.0945	C,R(0.01)	-2.91	2835	EPA3545A/8270D	0.157137		-0.69
2330	CPSC-CH-C1001-09.4	0.1451		-1.12	2858	In house	0.177		0.01
2347	CPSC-CH-C1001-09.4	0.1740		-0.10	2867	CPSC-CH-C1001-09.4	0.1731		-0.13
2350	IEC62321-8	0.1847		0.28	2870	In house	0.1717		-0.18
2352	CPSC-CH-C1001-09.4	0.1793		0.09	2885		----		----
2353	IEC	----		----	2931	In house	0.1249	C	-1.83
2354	CPSC-CH-C1001-09.4	----		----	2943	D8133	0.160		-0.59
2355	IEC62321-8	0.1741		-0.09	2948	CPSC-CH-C1001-09.4	0.172		-0.17
2357	CPSC-CH-C1001-09.4	0.1796		0.10	2959	CPSC-CH-C1001-09.4	0.178		0.04
2361	GB/T22048	----		----	2960	CPSC-CH-C1001-09.4	0.1810		0.15
2362	ISO8124-6	----		----	2976		0.160		-0.59
2363	CPSC-CH-C1001-09.4	0.1783	C	0.05	2977	CPSC-CH-C1001-09.3	----		----
2365	CPSC-CH-C1001-09.4	0.1817		0.18	2998	EN62321-8	0.1753		-0.05
2366	CPSC-CH-C1001-09.4	0.1835		0.24	2999		----		----
2369	CPSC-CH-C1001-09.4	0.1877		0.39	3000		----		----
2370	CPSC-CH-C1001-09.4	0.196		0.68	3005		----		----
2373	CPSC-CH-C1001-09.4	0.1746		-0.08	3006		----		----
2375	CPSC-CH-C1001-09.4	0.182		0.19	3015	CPSC-CH-C1001-09.4	0.181		0.15
2376		----		----	3020	CPSC-CH-C1001-09.4	0.1262		-1.79
2378	GB/T22048	0.187		0.36	3100	GB/T22048	0.1808		0.14
2379	JSFL336.ST2016-3	----		----	3110		----		----
2380	CPSC-CH-C1001-09.4	0.19328		0.58	3113		----		----

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3116		----		----	3210	In house	0.1887		0.42
3118	CPSC-CH-C1001-09.3	0.1623		-0.51	3214	CPSC-CH-C1001-09.4	0.19762		0.74
3153		----		----	3218	CPSC-CH-C1001-09.4	0.1784		0.06
3163		----		----	3225	CPSC-CH-C1001-09.4	----		----
3166	In house	0.1685		-0.29	3233	CPSC-CH-C1001-09.4	0.1838		0.25
3172	ISO8124-6	0.1402		-1.29	3237	CPSC-CH-C1001-09.4	0.1664		-0.37
3176	EN14372	0.173		-0.13	3246	ISO62321-8	0.1803		0.13
3182	CPSC-CH-C1001-09.4	0.1820		0.19	3247		----		----
3185		----		----	3248		----		----
3190	CPSC-CH-C1001-09.4	0.1865		0.34	3250	CPSC-CH-C1001-09.4	0.1827		0.21
3197	ISO8124-6	0.1858		0.32	8005		----		----
3199	In house	0.199	C	0.79	8008		----		----
3205	In house	0.154		-0.80	8030	CPSC-CH-C1001-09.4	0.1777		0.03
3209	CPSC-CH-C1001-09.4	0.178		0.04					
normality		not OK							
n		103							
outliers		5							
mean (n)		0.17674							
st.dev. (n)		0.015315		RSD = 9%					
R(calc.)		0.04288							
st.dev.(iis memo 1701)		0.028279							
R(iis memo 1701)		0.07918							

**f-? means Possibly a false negative test result?**

- Lab 110 first reported 0.1217
- Lab 2326 first reported 0.3602
- Lab 2363 first reported 1783%M/M
- Lab 2503 first reported 1524%M/M
- Lab 2590 first reported 0.12560
- Lab 2931 first reported 0.2387
- Lab 3199 first reported 0.232

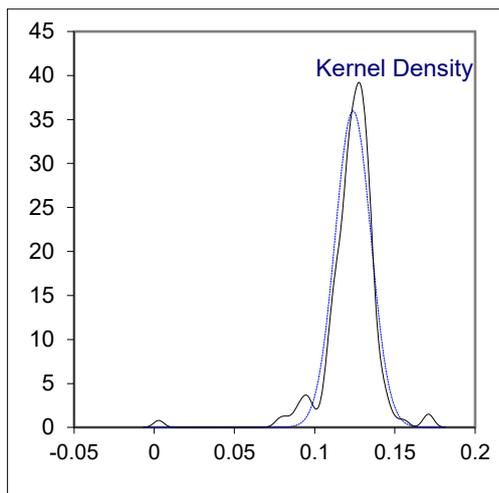
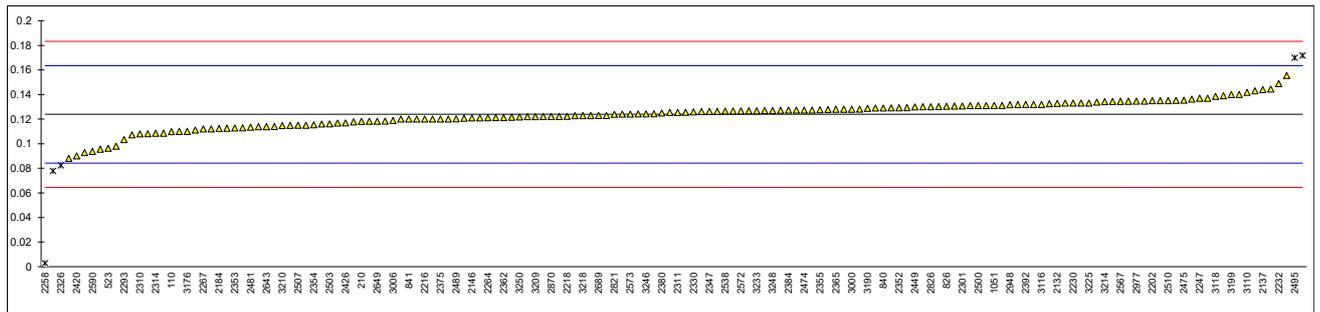


## Determination of DIBP - Di-iso-butyl phthalate on sample #23610; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.1098		-0.71	2381	CPSC-CH-C1001-09.4	0.1350		0.56
210	CPSC-CH-C1001-09.4	0.118156		-0.29	2384	IEC62321-8	0.1273		0.17
339	In house	0.121514		-0.12	2386	In house	0.1401		0.82
452	CPSC-CH-C1001-09.4	0.11		-0.70	2387	IEC62321-8	0.1071		-0.85
523	CPSC-CH-C1001-09.4	0.0963		-1.39	2392	IEC62321-8	0.1320		0.41
551		----		----	2406	CPSC-CH-C1001-09.4	0.1266		0.14
623	In house	0.131		0.36	2413	CPSC-CH-C1001-09.4	0.0956		-1.43
815	IEC62321-8	0.133		0.46	2415	CPSC-CH-C1001-09.4	0.1338		0.50
826	IEC62321-8	0.1304		0.33	2420		0.09		-1.71
840	CPSC-CH-C1001-09.4	0.129		0.26	2426	ISO14389	0.117		-0.35
841	CPSC-CH-C1001-09.4	0.120		-0.20	2429	CPSC-CH-C1001-09.4	0.1184		-0.28
1051	GB/T22048	0.1311		0.37	2431	CPSC-CH-C1001-09.3	0.1221		-0.09
1910	ISO8124-6	0.08815	C	-1.80	2442	CPSC-CH-C1001-09.4	0.1267		0.14
2102	In house	0.120		-0.20	2449	In house	0.1299		0.30
2104	CPSC-CH-C1001-09.4	0.1556		1.60	2460	CPSC-CH-C1001-09.4	0.1318		0.40
2115		----		----	2474	ISO8124-6	0.1274		0.18
2132	CPSC-CH-C1001-09.4	0.1328		0.45	2475	In house	0.1354		0.58
2137	KS M1991	0.144		1.02	2476		----		----
2146	CPSC-CH-C1001-09.4	0.1210		-0.14	2481	In house	0.1134		-0.53
2156	IEC62321-8	0.1444		1.04	2489	CPSC	0.1201		-0.19
2169	IEC62321-8	0.124		0.01	2494	CPSC-CH-C1001-09.4	0.1717	R(0.05)	2.41
2170		----		----	2495	CPSC-CH-C1001-09.4	0.1699	R(0.05)	2.32
2176	In house	0.1139		-0.50	2500	CPSC-CH-C1001-09.4	0.131		0.36
2182	CPSC-CH-C1001-09.4	0.1281		0.21	2503	CPSC-CH-C1001-09.4	0.1161	C	-0.39
2184	CPSC-CH-C1001-09.4	0.1124		-0.58	2507	CPSC-CH-C1001-09.4	0.115		-0.45
2201	CPSC-CH-C1001-09.4	0.1306		0.34	2510	In house	0.135		0.56
2202	IEC62321-8	0.1350		0.56	2511	ISO16181-1	0.12		-0.20
2216	CPSC-CH-C1001-09.4	0.12		-0.20	2529	CPSC-CH-C1001-09.4	0.13110		0.37
2218	CPSC-CH-C1001-09.4	0.1223		-0.08	2532	CPSC-CH-C1001-09.4	0.1256		0.09
2230	In house	0.1330		0.46	2538	In house	0.1265		0.13
2232	CPSC-CH-C1001-09.4	0.149		1.27	2567	CPSC-CH-C1001-09.4	0.1344		0.53
2241	ISO8124-6	0.1182		-0.29	2569	CPSC-CH-C1001-09.4	0.13		0.31
2242	CPSC-CH-C1001-09.4	0.1229		-0.05	2572	CPSC-CH-C1001-09.4	0.1266		0.14
2247	CPSC-CH-C1001-09.4	0.137		0.66	2573	CPSC-CH-C1001-09.4	0.124		0.01
2256	In house	0.127		0.16	2590	CPSC-CH-C1001-09.4	0.09369		-1.52
2258	CPSC-CH-C1001-09.4	0.002848	R(0.01)	-6.11	2591	CPSC-CH-C1001-09.4	0.143		0.97
2264	ISO14389/ GB/T20388	0.1211		-0.14	2605	CPSC-CH-C1001-09.4	0.1291		0.26
2265	CPSC-CH-C1001-09.4	0.1343		0.53	2629	CPSC-CH-C1001-09.4	0.1330		0.46
2267		0.112		-0.60	2643	KS M1991	0.1139		-0.50
2284	CPSC-CH-C1001-09.4	0.1243		0.02	2649	CPSC-CH-C1001-09.4	0.1182		-0.29
2288	CPSC-CH-C1001-09.3	0.13637		0.63	2678	CPSC-CH-C1001-09.4	0.1353		0.58
2289	CPSC-CH-C1001-09.4	0.113		-0.55	2689	CPSC-CH-C1001-09.3	0.123		-0.04
2290	CPSC-CH-C1001-09.4	0.1278		0.20	2703	CPSC-CH-C1001-09.4	0.114		-0.50
2293	CPSC-CH-C1001-09.4	0.1033		-1.04	2720		0.1207		-0.16
2301	CPSC-CH-C1001-09.4	0.1308		0.35	2722	CPSC-CH-C1001-09.4	0.1345		0.54
2310	CPSC-CH-C1001-09.4	0.108		-0.80	2736	In house	0.1244		0.03
2311	CPSC-CH-C1001-09.4	0.1255		0.08	2797	In house	----		----
2313	CPSC-CH-C1001-09.4	0.1168		-0.36	2821	In house	0.12391695		0.00
2314	CPSC-CH-C1001-09.4	0.1085		-0.78	2826	IEC62321-8	0.13		0.31
2316	IEC62321-8	0.10862		-0.77	2829	CPSC-CH-C1001-09.4	0.121		-0.14
2326		0.0824	C,R(0.05)	-2.09	2835	EPA3545A/8270D	0.108107		-0.80
2330	CPSC-CH-C1001-09.4	0.1259		0.10	2858	In house	0.131		0.36
2347	CPSC-CH-C1001-09.4	0.1263		0.12	2867	CPSC-CH-C1001-09.4	0.1302		0.32
2350	IEC62321-8	0.1282		0.22	2870	In house	0.1222		-0.08
2352	CPSC-CH-C1001-09.4	0.1292		0.27	2885	In house	0.098		-1.31
2353	IEC	0.11278		-0.56	2931	In house	0.0779	C,R(0.05)	-2.32
2354	CPSC-CH-C1001-09.4	0.1154		-0.43	2943	D8133	0.123		-0.04
2355	IEC62321-8	0.1276		0.19	2948	CPSC-CH-C1001-09.4	0.1317	C	0.40
2357	CPSC-CH-C1001-09.4	0.1274		0.18	2959	CPSC-CH-C1001-09.4	0.115		-0.45
2361	GB/T22048	0.12116		-0.14	2960	CPSC-CH-C1001-09.4	0.1263		0.12
2362	ISO8124-6	0.12116276		-0.14	2976		0.111		-0.65
2363	CPSC-CH-C1001-09.4	0.1262	C	0.12	2977	CPSC-CH-C1001-09.3	0.1347		0.55
2365	CPSC-CH-C1001-09.4	0.1280		0.21	2998	EN62321-8	----		----
2366	CPSC-CH-C1001-09.4	0.1200		-0.20	2999		0.1272		0.17
2369	CPSC-CH-C1001-09.4	0.1200		-0.20	3000	CPSC-CH-C1001-09.4	0.1281		0.21
2370	CPSC-CH-C1001-09.4	0.139		0.76	3005	In house	0.1320		0.41
2373	CPSC-CH-C1001-09.4	0.1227		-0.06	3006	IEC62321-8	0.1188		-0.26
2375	CPSC-CH-C1001-09.4	0.120		-0.20	3015	CPSC-CH-C1001-09.4	0.122		-0.09
2376		----		----	3020	CPSC-CH-C1001-09.4	0.0928		-1.57
2378	GB/T22048	0.129		0.26	3100	GB/T22048	0.1222		-0.08
2379	JSFL336.ST2016-3	0.1178		-0.31	3110	CPSC-CH-C1001-09.4	0.1418		0.90
2380	CPSC-CH-C1001-09.4	0.1250		0.06	3113		----		----

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3116	CPSC-CH-C1001-09.4	0.132		0.41	3210	In house	0.1147		-0.46
3118	CPSC-CH-C1001-09.3	0.1385		0.74	3214	CPSC-CH-C1001-09.4	0.13423		0.52
3153	CPSC-CH-C1001-09.4	0.1325		0.44	3218	CPSC-CH-C1001-09.4	0.1228		-0.05
3163		-----		-----	3225	CPSC-CH-C1001-09.4	0.133		0.46
3166	In house	0.1254		0.08	3233	CPSC-CH-C1001-09.4	0.1268		0.15
3172	ISO8124-6	0.1148		-0.46	3237	CPSC-CH-C1001-09.4	0.1126		-0.57
3176	EN14372	0.110		-0.70	3246	ISO62321-8	0.1243		0.02
3182	CPSC-CH-C1001-09.4	0.1120		-0.60	3247		-----		-----
3185	CPSC-CH-C1001-09.4	0.1274		0.18	3248	CPSC-CH-C1001-09.4	0.127		0.16
3190	CPSC-CH-C1001-09.4	0.1288		0.25	3250	CPSC-CH-C1001-09.4	0.1218		-0.10
3197	ISO8124-6	0.1347		0.55	8005	ISO8124-6	0.137		0.66
3199	In house	0.140	C	0.81	8008		-----		-----
3205	In house	0.116		-0.40	8030	CPSC-CH-C1001-09.4	0.1293		0.27
3209	CPSC-CH-C1001-09.4	0.122		-0.09					
	normality	suspect							
	n	155							
	outliers	5							
	mean (n)	0.12387							
	st.dev. (n)	0.011089		RSD = 9%					
	R(calc.)	0.03105							
	st.dev.(iis memo 1701)	0.019819							
	R(iis memo 1701)	0.05549							

- Lab 1910 first reported 0.28225
- Lab 2326 first reported 0.2757
- Lab 2363 first reported 1262%M/M
- Lab 2503 first reported 1161%M/M
- Lab 2931 first reported 0.1917
- Lab 2948 first reported 0.312
- Lab 3199 first reported 0.197



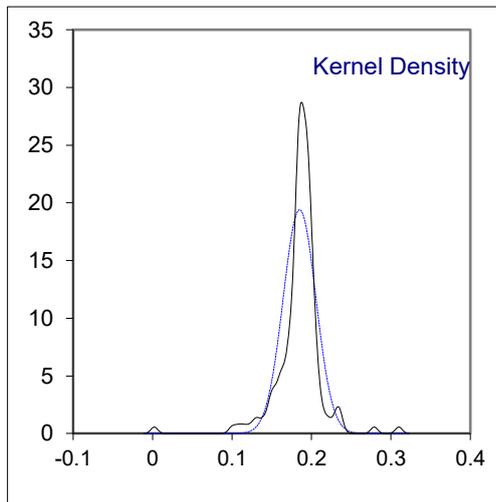
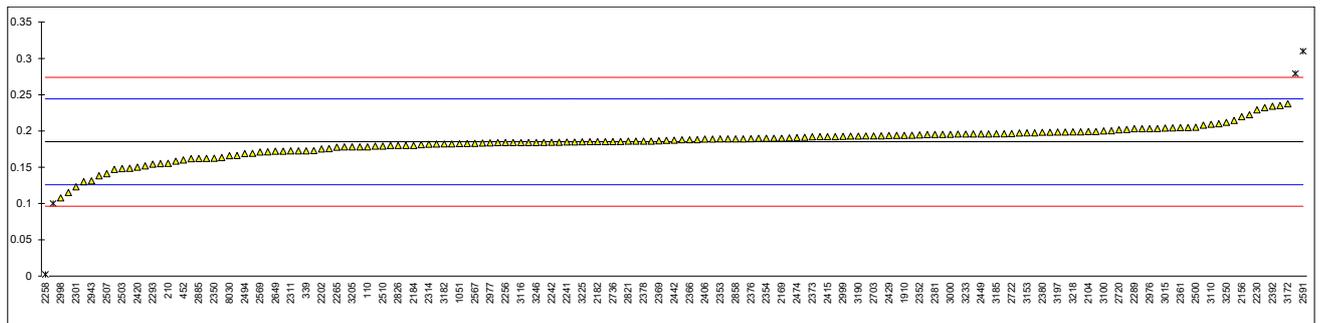
## Determination of DBP - Dibutyl phthalate on sample #23611; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.1781		-0.24	2381	CPSC-CH-C1001-09.4	0.1950		0.33
210	CPSC-CH-C1001-09.4	0.155172		-1.01	2384	In house	0.2001		0.51
339	In house	0.172528		-0.42	2386	In house	0.1986		0.46
452	CPSC-CH-C1001-09.4	0.16		-0.85	2387	IEC62321-8	0.1818		-0.11
523	CPSC-CH-C1001-09.4	0.1381		-1.59	2392	IEC62321-8	0.2341		1.65
551		----		----	2406	CPSC-CH-C1001-09.4	0.1887		0.12
623	In house	0.235		1.68	2413	CPSC-CH-C1001-09.4	0.1486		-1.23
815	IEC62321-8	0.193		0.27	2415	CPSC-CH-C1001-09.4	0.1920		0.23
826	IEC62321-8	0.1617		-0.79	2420		0.15	C	-1.19
840	CPSC-CH-C1001-09.4	0.190		0.17	2426	ISO14389	0.184		-0.04
841	CPSC-CH-C1001-09.4	0.186		0.03	2429	CPSC-CH-C1001-09.4	0.1936		0.29
1051	GB/T22048	0.1825		-0.09	2431	CPSC-CH-C1001-09.3	0.1755		-0.32
1910	ISO8124-6	0.19385		0.30	2442	CPSC-CH-C1001-09.4	0.1872		0.07
2102		0.181		-0.14	2449		0.196		0.37
2104	CPSC-CH-C1001-09.4	0.1992		0.48	2460	CPSC-CH-C1001-09.4	0.279	C,G(0.01)	3.17
2115		----		----	2474	ISO8124-6	0.1908		0.19
2132	CPSC-CH-C1001-09.4	0.1957		0.36	2475	ISO8124-6	0.2147		1.00
2137	KS M1991	0.179		-0.21	2476		----		----
2146	CPSC-CH-C1001-09.4	0.1905		0.18	2481		0.1622		-0.77
2156	IEC62321-8	0.2197		1.17	2489	CPSC	0.1848		-0.01
2169	IEC62321-8	0.190		0.17	2494	CPSC-CH-C1001-09.4	0.1686		-0.56
2170		----		----	2495	CPSC-CH-C1001-09.4	0.1712		-0.47
2176	In house	0.1870		0.06	2500	CPSC-CH-C1001-09.4	0.205		0.67
2182	CPSC-CH-C1001-09.4	0.1853		0.01	2503		0.1482	C	-1.25
2184	CPSC-CH-C1001-09.4	0.1801		-0.17	2507	CPSC-CH-C1001-09.4	0.141		-1.49
2201	CPSC-CH-C1001-09.4	0.2030		0.60	2510	In house	0.179		-0.21
2202	IEC62321-8	0.1752		-0.33	2511	CPSC-CH-C1001-09.4	0.21		0.84
2216	CPSC-CH-C1001-09.4	0.18		-0.17	2529	CPSC-CH-C1001-09.4	0.19328		0.28
2218	CPSC-CH-C1001-09.4	0.1851		0.00	2532	CPSC-CH-C1001-09.4	0.1951		0.34
2230	In house	0.2290		1.48	2538	In house	0.1844		-0.02
2232		----		----	2567	CPSC-CH-C1001-09.4	0.1829		-0.07
2241	CPSC-CH-C1001-09.4	0.1848		-0.01	2569	ISO16181-1	0.171		-0.48
2242	CPSC-CH-C1001-09.4	0.1844		-0.02	2572	CPSC-CH-C1001-09.4	0.1840		-0.04
2247	CPSC-CH-C1001-09.4	0.196		0.37	2573	CPSC-CH-C1001-09.4	0.186		0.03
2256	In house	0.184		-0.04	2590	CPSC-CH-C1001-09.4	0.13014		-1.86
2258	CPSC-CH-C1001-09.4	0.002196	G(0.01)	-6.18	2591		0.310	G(0.01)	4.22
2264	ISO14389/ GB/T20388	0.1833		-0.06	2605	CPSC-CH-C1001-09.4	0.1988		0.46
2265	CPSC-CH-C1001-09.4	0.1777		-0.25	2629	CPSC-CH-C1001-09.4	0.189		0.13
2267		0.115		-2.37	2643	KS M1991	0.1690		-0.54
2284	CPSC-CH-C1001-09.4	0.1913		0.21	2649	CPSC-CH-C1001-09.4	0.1721		-0.44
2288	CPSC-CH-C1001-09.3	0.18978		0.16	2678	CPSC-CH-C1001-09.4	0.2223		1.26
2289	CPSC-CH-C1001-09.4	0.203		0.60	2689	CPSC-CH-C1001-09.3	0.196		0.37
2290	CPSC-CH-C1001-09.4	0.1827		-0.08	2703	CPSC-CH-C1001-09.4	0.193		0.27
2293	CPSC-CH-C1001-09.4	0.1543		-1.04	2720		0.2016		0.56
2301	CPSC-CH-C1001-09.4	0.1229		-2.10	2722	CPSC-CH-C1001-09.4	0.1964		0.38
2310	CPSC-CH-C1001-09.4	0.173		-0.41	2736	In house	0.1854		0.01
2311	CPSC-CH-C1001-09.4	0.1725		-0.43	2797	In house	0.18564		0.02
2313	ISO14389	0.1972		0.41	2821	In house	0.18597982		0.03
2314	ISO8124-6	0.1817		-0.11	2826	IEC62321-8	0.18		-0.17
2316	IEC62321-8	0.18418		-0.03	2829		0.180		-0.17
2326	ISO14389	0.178	C	-0.24	2835	EPA3545A/8270D	0.158405		-0.90
2330	CPSC-CH-C1001-09.4	0.1725		-0.43	2858	In house	0.189		0.13
2347	CPSC-CH-C1001-09.4	0.1940		0.30	2867	CPSC-CH-C1001-09.4	0.1853		0.01
2350	IEC62321-8	0.1624		-0.77	2870	In house	0.1518		-1.12
2352	CPSC-CH-C1001-09.4	0.1944		0.31	2885	In house	0.162		-0.78
2353	IEC	0.188922		0.13	2931	In house	0.2043		0.65
2354	CPSC-CH-C1001-09.4	0.1898		0.16	2943	D8133	0.131		-1.83
2355	IEC62321-8	0.1928		0.26	2948	CPSC-CH-C1001-09.4	0.1888		0.12
2357	CPSC-CH-C1001-09.4	0.1878		0.09	2959	CPSC-CH-C1001-09.4	0.189		0.13
2361	GB/T22048	0.20473		0.66	2960	CPSC-CH-C1001-09.4	0.1974		0.42
2362	ISO8124-6	0.20473148		0.66	2976		0.203		0.60
2363	CPSC-CH-C1001-09.4	0.1962	C	0.37	2977	CPSC-CH-C1001-09.3	0.1835		-0.05
2365	CPSC-CH-C1001-09.4	0.2032		0.61	2998	EN62321-8	0.1078		-2.61
2366	CPSC-CH-C1001-09.4	0.1878		0.09	2999	CPSC-CH-C1001-09.4	0.1925		0.25
2369	CPSC-CH-C1001-09.4	0.1863		0.04	3000	CPSC-CH-C1001-09.4	0.1952		0.34
2370	IEC62321-8	0.192		0.23	3005	In house	0.1938		0.29
2373	CPSC-CH-C1001-09.4	0.1919		0.23	3006	IEC62321-8	0.1549		-1.02
2375	CPSC-CH-C1001-09.4	0.192		0.23	3015	CPSC-CH-C1001-09.4	0.204		0.64
2376	ST2016	0.18911		0.14	3020	CPSC-CH-C1001-09.4	0.1469		-1.29
2378	GB/T22048	0.186		0.03	3100	IEC62321-8	0.2000		0.50
2379	IEC62321-8	0.2320		1.58	3110	CPSC-CH-C1001-09.4	0.2091		0.81
2380	CPSC-CH-C1001-09.4	0.19809		0.44	3113	GB/T22048	0.1992		0.48

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3116	ST2016	0.184		-0.04	3210	In house	0.1948		0.33
3118	CPSC-CH-C1001-09.3	0.1660		-0.64	3214	CPSC-CH-C1001-09.4	0.19812		0.44
3153	CPSC-CH-C1001-09.4	0.1973		0.41	3218	CPSC-CH-C1001-09.4	0.1987		0.46
3163		0.1	G(0.05)	-2.87	3225	CPSC-CH-C1001-09.4	0.185		0.00
3166	In house	0.1631		-0.74	3233	CPSC-CH-C1001-09.4	0.1957		0.36
3172	ISO8124-6	0.2373		1.76	3237		0.1722		-0.44
3176	EN14372	0.184		-0.04	3246	IEC62321-8	0.1840		-0.04
3182	CPSC-CH-C1001-09.3	0.1820		-0.10	3247		-----		-----
3185	CPSC-CH-C1001-09.4	0.1961		0.37	3248	CPSC-CH-C1001-09.4	0.188		0.10
3190	CPSC-CH-C1001-09.4	0.1929		0.26	3250		0.2117		0.90
3197	GB/T22048	0.1985		0.45	8005	EN14372	0.182		-0.10
3199	In house	0.202		0.57	8008	JTST2016	0.2078		0.77
3205	In house	0.178		-0.24	8030	ISO8124-6	0.1658		-0.65
3209	CPSC-CH-C1001-09.4	0.178		-0.24					

normality not OK  
 n 161  
 outliers 4  
 mean (n) 0.18510  
 st.dev. (n) 0.020575 RSD = 11%  
 R(calc.) 0.05761  
 st.dev.(iis memo 1701) 0.029616  
 R(iis memo 1701) 0.08292

Lab 2326 first reported 0.3242  
 Lab 2363 first reported 1962 %M/M  
 Lab 2420 first reported 1.54  
 Lab 2460 first reported 0.0  
 Lab 2503 first reported 1482 %M/M



## Determination of DNOP - Di-n-octyl phthalate on sample #23611; results in %M/M

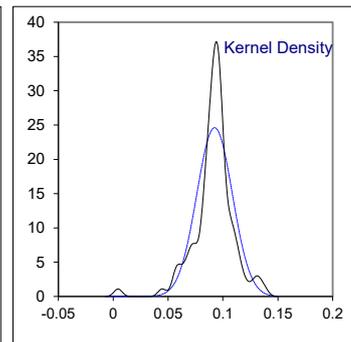
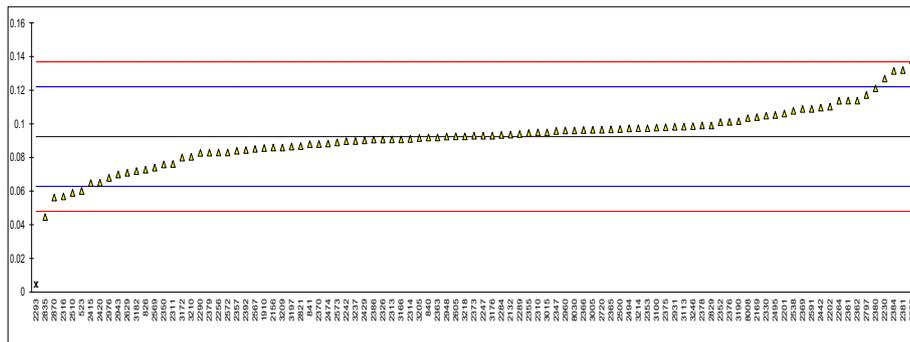
lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	not det	f-?	----	2381	CPSC-CH-C1001-09.4	0.1320		2.68
210		----		----	2384	In house	0.1315		2.64
339	In house	not det	f-?	----	2386	In house	0.0907		-0.12
452	CPSC-CH-C1001-09.4	Not det	f-?	----	2387	IEC62321-8	----		----
523	CPSC-CH-C1001-09.4	0.0601		-2.19	2392	IEC62321-8	0.0845		-0.54
551		----		----	2406	CPSC-CH-C1001-09.4	not det	f-?	----
623	In house	Not Det	f-?	----	2413	CPSC-CH-C1001-09.4	Not Det	f-?	----
815	IEC62321-8	<0.005	f-?	<-5.91	2415	CPSC-CH-C1001-09.4	0.0649		-1.86
826	IEC62321-8	0.0728		-1.33	2420		0.065	C	-1.86
840	CPSC-CH-C1001-09.4	0.092		-0.03	2426	ISO14389	Not Det	f-?	----
841	CPSC-CH-C1001-09.4	0.088		-0.30	2429	CPSC-CH-C1001-09.4	0.0903		-0.14
1051		----		----	2431		----		----
1910	ISO8124-6	0.08570		-0.46	2442	CPSC-CH-C1001-09.4	0.1097		1.17
2102		Not det	f-?	----	2449		----		----
2104	CPSC-CH-C1001-09.4	< 0.0005	f-?	<-6.22	2460		----		----
2115		----		----	2474	ISO8124-6	0.08834	C	-0.28
2132	CPSC-CH-C1001-09.4	0.0937		0.09	2475		----		----
2137		----		----	2476		----		----
2146	CPSC-CH-C1001-09.4	<0,1%		----	2481		Not det	f-?	----
2156	IEC62321-8	0.0860		-0.44	2489		----		----
2169	IEC62321-8	0.104		0.78	2494	CPSC-CH-C1001-09.4	0.0973		0.33
2170		----		----	2495	CPSC-CH-C1001-09.4	0.1054		0.88
2176	In house	----		----	2500	CPSC-CH-C1001-09.4	0.097		0.31
2182		----		----	2503		0.1378	C	3.07
2184		----		----	2507		----		----
2201	CPSC-CH-C1001-09.4	0.1062		0.93	2510	In house	0.059		-2.26
2202	IEC62321-8	0.1103		1.21	2511		----		----
2216	CPSC-CH-C1001-09.4	Not Det	f-?	----	2529		----		----
2218		----		----	2532		----		----
2230	In house	0.1270		2.34	2538	In house	0.1078		1.04
2232		----		----	2567	CPSC-CH-C1001-09.4	0.0852		-0.49
2241	CPSC-CH-C1001-09.4	<0.0005	f-?	----	2569	ISO16181-1	0.074		-1.25
2242	CPSC-CH-C1001-09.4	0.0898		-0.18	2572	CPSC-CH-C1001-09.4	0.0830		-0.64
2247	CPSC-CH-C1001-09.4	0.093		0.04	2573	CPSC-CH-C1001-09.4	0.089		-0.23
2256	In house	0.083		-0.64	2590		----		----
2258	CPSC-CH-C1001-09.4	not det	f-?	----	2591		0.109		1.12
2264	ISO14389/ GB/T20388	0.1138		1.44	2605	CPSC-CH-C1001-09.4	0.0926		0.01
2265	CPSC-CH-C1001-09.4	<0.01	C, f-?	<-5.57	2629	CPSC-CH-C1001-09.4	0.071		-1.45
2267		----		----	2643		----		----
2284	CPSC-CH-C1001-09.4	0.0935		0.07	2649	CPSC-CH-C1001-09.4	not det	f-?	----
2288	CPSC-CH-C1001-09.3	----		----	2678		----		----
2289	CPSC-CH-C1001-09.4	0.094		0.11	2689	CPSC-CH-C1001-09.3	not det	f-?	----
2290	CPSC-CH-C1001-09.4	0.0828		-0.65	2703	CPSC-CH-C1001-09.4	Not Det	f-?	----
2293	CPSC-CH-C1001-09.4	0.0045	C,R(0.01)	-5.95	2720		0.0966		0.28
2301		----		----	2722		----		----
2310	CPSC-CH-C1001-09.4	0.095		0.17	2736		----		----
2311	CPSC-CH-C1001-09.4	0.0762		-1.10	2797	In house	0.11721		1.68
2313	ISO14389	0.0908		-0.11	2821	In house	0.08689333		-0.37
2314	ISO8124-6	0.0911		-0.09	2826		----		----
2316	IEC62321-8	0.05697		-2.40	2829		0.099		0.44
2326	ISO14389	0.0907		-0.12	2835	EPA3545A/8270D	0.044673	C	-3.23
2330	CPSC-CH-C1001-09.4	0.1049		0.84	2858	In house	not det	f-?	----
2347	CPSC-CH-C1001-09.4	0.0958		0.23	2867	CPSC-CH-C1001-09.4	not det	f-?	----
2350	IEC62321-8	0.0759		-1.12	2870	In house	0.0563		-2.44
2352	CPSC-CH-C1001-09.4	0.1010		0.58	2885	In house	----		----
2353	IEC	0.097435		0.34	2931	In house	0.0983		0.40
2354	CPSC-CH-C1001-09.4	----		----	2943	D8133	0.070		-1.52
2355	IEC62321-8	0.0946		0.15	2948	CPSC-CH-C1001-09.4	0.0925		0.00
2357	CPSC-CH-C1001-09.4	0.0840		-0.57	2959		----		----
2361	GB/T22048	0.11384		1.45	2960	CPSC-CH-C1001-09.4	0.0961		0.25
2362	ISO8124-6	0.11384507		1.45	2976		0.068		-1.65
2363	CPSC-CH-C1001-09.4	0.0920	C	-0.03	2977	CPSC-CH-C1001-09.3	not det	f-?	----
2365	CPSC-CH-C1001-09.4	0.0968		0.30	2998	EN62321-8	not det	f-?	----
2366	CPSC-CH-C1001-09.4	0.0964		0.27	2999		----		----
2369	CPSC-CH-C1001-09.4	0.1090		1.12	3000		----		----
2370	IEC62321-8	0.0881		-0.29	3005	In house	0.0965		0.27
2373	CPSC-CH-C1001-09.4	0.0930		0.04	3006		----		----
2375	CPSC-CH-C1001-09.4	0.098		0.38	3015	CPSC-CH-C1001-09.4	0.095		0.17
2376	ST2016	0.10119		0.59	3020		----		----
2378	GB/T22048	0.099		0.44	3100	IEC62321-8	0.0978		0.36
2379	IEC62321-8	0.0829		-0.64	3110		----		----
2380	CPSC-CH-C1001-09.4	0.1211		1.94	3113	GB/T22048	0.0984		0.40

lab	Method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3116		----		----	3210	In house	0.0804		-0.81
3118		----		----	3214	CPSC-CH-C1001-09.4	0.09743		0.34
3153		----		----	3218	CPSC-CH-C1001-09.4	0.0926		0.01
3163		----		----	3225	CPSC-CH-C1001-09.4	----		----
3166	In house	0.0908		-0.11	3233	CPSC-CH-C1001-09.4	< 0.01	f-?	<-5.57
3172	ISO8124-6	0.0800		-0.84	3237		0.0899		-0.17
3176	EN14372	0.093		0.04	3246	IEC62321-8	0.0987		0.42
3182	CPSC-CH-C1001-09.3	0.0720		-1.38	3247		----		----
3185		----		----	3248		----		----
3190	CPSC-CH-C1001-09.4	0.1016		0.62	3250		----		----
3197	GB/T22048	0.0866		-0.39	8005		----		----
3199	In house	<0.005	f-?	<-5.91	8008	JTST2016	0.1035		0.75
3205	In house	0.0917		-0.05	8030	ISO8124-6	0.0961		0.25
3209	CPSC-CH-C1001-09.4	0.086		-0.44					

Normality suspect  
n 96  
Outliers 1  
mean (n) 0.09244  
st.dev. (n) 0.016202 RSD = 18%  
R(calc.) 0.04536  
st.dev.(iis memo 1701) 0.014790  
R(iis memo 1701) 0.04141

**f-? means Possibly a false negative test result?**

- Lab 2265 first reported <100, reported <0.01.
- Lab 2293 first reported 0
- Lab 2363 first reported 920 %M/M
- Lab 2420 first reported 0.65
- Lab 2474 first reported 0.8834
- Lab 2503 first reported 1378 %M/M
- Lab 2835 first reported 0.035828



## Determination of DCHP - Dicyclohexyl phthalate on sample #23611; results in %M/M

lab	method	Value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.1148		-0.34	2381	CPSC-CH-C1001-09.4	0.1375		0.82
210	CPSC-CH-C1001-09.4	0.130049		0.44	2384	In house	0.1367		0.78
339	In house	0.108584		-0.66	2386	In house	0.111		-0.54
452	CPSC-CH-C1001-09.4	0.13		0.44	2387	IEC62321-8	----		----
523	CPSC-CH-C1001-09.4	0.0941		-1.41	2392	IEC62321-8	----		----
551		----		----	2406	CPSC-CH-C1001-09.4	0.1090		-0.64
623	In house	0.135		0.69	2413	CPSC-CH-C1001-09.4	Not Det	f-?	----
815		----		----	2415	CPSC-CH-C1001-09.4	0.1154		-0.31
826	IEC62321-8	0.1291		0.39	2420		0.050	C,R(0.01)	-3.68
840	CPSC-CH-C1001-09.4	0.116		-0.28	2426	ISO14389	0.103		-0.95
841	CPSC-CH-C1001-09.4	0.118		-0.18	2429	CPSC-CH-C1001-09.4	0.1449		1.20
1051	GB/T22048	0.1038		-0.91	2431	CPSC-CH-C1001-09.3	0.1155		-0.31
1910		----		----	2442	CPSC-CH-C1001-09.4	0.1155		-0.31
2102		----		----	2449		0.1145		-0.36
2104	CPSC-CH-C1001-09.4	0.1396		0.93	2460	CPSC-CH-C1001-09.4	0.1611		2.04
2115	CPSC-CH-C1001-09.4	0.097		-1.26	2474		----		----
2132	CPSC-CH-C1001-09.4	0.1089		-0.65	2475	ISO8124-6	0.1427		1.09
2137		----		----	2476		----		----
2146		----		----	2481		0.1197		-0.09
2156	IEC62321-8	0.1354		0.72	2489	CPSC	0.1141		-0.38
2169		----		----	2494	CPSC-CH-C1001-09.4	0.0858		-1.84
2170		----		----	2495	CPSC-CH-C1001-09.4	0.0928		-1.48
2176	In house	----		----	2500	CPSC-CH-C1001-09.4	0.122		0.03
2182	CPSC-CH-C1001-09.4	0.1193		-0.11	2503		0.1103	C	-0.58
2184	CPSC-CH-C1001-09.4	0.1210		-0.03	2507	CPSC-CH-C1001-09.4	0.114		-0.39
2201	CPSC-CH-C1001-09.4	0.1319		0.54	2510	In house	0.118		-0.18
2202	IEC62321-8	----		----	2511	CPSC-CH-C1001-09.4	0.11		-0.59
2216	CPSC-CH-C1001-09.4	0.13		0.44	2529	CPSC-CH-C1001-09.4	0.12975		0.42
2218	CPSC-CH-C1001-09.4	0.1266		0.26	2532	CPSC-CH-C1001-09.4	0.1212		-0.02
2230	In house	0.1430		1.11	2538		----		----
2232		0.135		0.69	2567	CPSC-CH-C1001-09.4	0.1359		0.74
2241	CPSC-CH-C1001-09.4	0.1167		-0.25	2569	ISO16181-1	0.11		-0.59
2242	CPSC-CH-C1001-09.4	0.1245		0.15	2572	CPSC-CH-C1001-09.4	0.1291		0.39
2247	CPSC-CH-C1001-09.4	0.104		-0.90	2573	CPSC-CH-C1001-09.4	0.121		-0.03
2256	In house	0.121		-0.03	2590	CPSC-CH-C1001-09.4	0.04938	C,R(0.01)	-3.71
2258	CPSC-CH-C1001-09.4	0.001952	R(0.01)	-6.15	2591		0.158		1.88
2264	ISO14389/ GB/T20388	0.1194		-0.11	2605	CPSC-CH-C1001-09.4	0.1338		0.63
2265	CPSC-CH-C1001-09.4	<0.01	C, f-?	<-5.7	2629	CPSC-CH-C1001-09.4	0.131		0.49
2267		0.004	R(0.01)	-6.04	2643		----		----
2284	CPSC-CH-C1001-09.4	0.1352		0.70	2649	CPSC-CH-C1001-09.4	0.1087		-0.66
2288	CPSC-CH-C1001-09.3	----		----	2678	CPSC-CH-C1001-09.4	0.1347		0.68
2289	CPSC-CH-C1001-09.4	0.140		0.95	2689	CPSC-CH-C1001-09.3	0.113		-0.44
2290	CPSC-CH-C1001-09.4	0.1278		0.32	2703	CPSC-CH-C1001-09.4	0.131		0.49
2293	CPSC-CH-C1001-09.4	0.087		-1.77	2720		0.1306		0.47
2301		----	C W	----	2722	CPSC-CH-C1001-09.4	0.1247		0.16
2310	CPSC-CH-C1001-09.4	0.109		-0.64	2736	In house	0.1249		0.18
2311	CPSC-CH-C1001-09.4	0.1080		-0.69	2797	In house	----		----
2313	ISO14389	0.1276		0.31	2821	In house	0.12663516		0.26
2314	ISO8124-6	0.1111		-0.53	2826		----		----
2316	IEC62321-8	----		----	2829		0.124		0.13
2326	ISO14389	0.0132	C,R(0.01)	-5.57	2835		----		----
2330	CPSC-CH-C1001-09.4	0.1300		0.44	2858	In house	0.100		-1.11
2347	CPSC-CH-C1001-09.4	0.1272		0.29	2867	CPSC-CH-C1001-09.4	0.1218		0.02
2350	IEC62321-8	0.1338		0.63	2870	In house	0.1054		-0.83
2352	CPSC-CH-C1001-09.4	0.1153		-0.32	2885		----		----
2353	IEC	----		----	2931	In house	0.0562	R(0.01)	-3.36
2354	CPSC-CH-C1001-09.4	0.11677		-0.24	2943	D8133	Not quantif.	f-?	----
2355	IEC62321-8	0.1267		0.27	2948	CPSC-CH-C1001-09.4	0.1220		0.03
2357	CPSC-CH-C1001-09.4	0.1075		-0.72	2959	CPSC-CH-C1001-09.4	0.134		0.64
2361	GB/T22048	----		----	2960	CPSC-CH-C1001-09.4	0.1330		0.59
2362	ISO8124-6	----		----	2976		0.127		0.28
2363	CPSC-CH-C1001-09.4	0.1193	C	-0.11	2977	CPSC-CH-C1001-09.3	----		----
2365	CPSC-CH-C1001-09.4	0.1199		-0.08	2998	EN62321-8	----		----
2366	CPSC-CH-C1001-09.4	0.1191		-0.12	2999	CPSC-CH-C1001-09.4	0.1268		0.27
2369	CPSC-CH-C1001-09.4	0.1182		-0.17	3000	CPSC-CH-C1001-09.4	0.1278		0.32
2370	IEC62321-8	0.112		-0.49	3005	In house	0.1259		0.23
2373	CPSC-CH-C1001-09.4	0.1273		0.30	3006		----		----
2375	CPSC-CH-C1001-09.4	0.118		-0.18	3015	CPSC-CH-C1001-09.4	0.131		0.49
2376	ST2016	----		----	3020	CPSC-CH-C1001-09.4	0.1088		-0.65
2378	GB/T22048	0.118		-0.18	3100	IEC62321-8	0.1338		0.63
2379	IEC62321-8	0.1262		0.24	3110	CPSC-CH-C1001-09.4	0.1153		-0.32
2380	CPSC-CH-C1001-09.4	0.1201		-0.07	3113		----		----

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3116		----		----	3210	In house	0.1008		-1.06
3118	CPSC-CH-C1001-09.3	0.1028		-0.96	3214	CPSC-CH-C1001-09.4	0.13366		0.63
3153	CPSC-CH-C1001-09.4	0.1257		0.22	3218	CPSC-CH-C1001-09.4	0.1241		0.13
3163		----		----	3225	CPSC-CH-C1001-09.4	0.121		-0.03
3166	In house	----		----	3233	CPSC-CH-C1001-09.4	0.1259		0.23
3172	ISO8124-6	0.1170		-0.23	3237		0.0963		-1.30
3176	EN14372	0.115		-0.33	3246	IEC62321-8	0.1263		0.25
3182	CPSC-CH-C1001-09.3	0.1310		0.49	3247		----		----
3185	CPSC-CH-C1001-09.4	0.1338		0.63	3248	CPSC-CH-C1001-09.4	0.122		0.03
3190	CPSC-CH-C1001-09.4	0.1376		0.83	3250		0.1241		0.13
3197	GB/T22048	0.1285		0.36	8005		----		----
3199	In house	0.109		-0.64	8008		----		----
3205	In house	0.12		-0.08	8030	ISO8124-6	----		----
3209	CPSC-CH-C1001-09.4	0.123		0.08					
normality		OK							
n		124							
outliers		6							
mean (n)		0.12150							
st.dev. (n)		0.012789	RSD = 11%						
R(calc.)		0.03581							
st.dev.(iis memo 1701)		0.019439							
R(iis memo 1701)		0.05443							

**f-? means Possibly a false negative test result?**

Lab 2265 first reported <100, reported <0.01.

Lab 2293 first reported 0.0754

Lab 2301 test result withdrawn, reported 0.0184

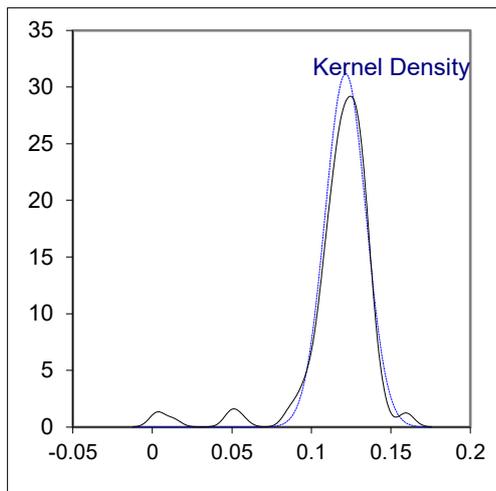
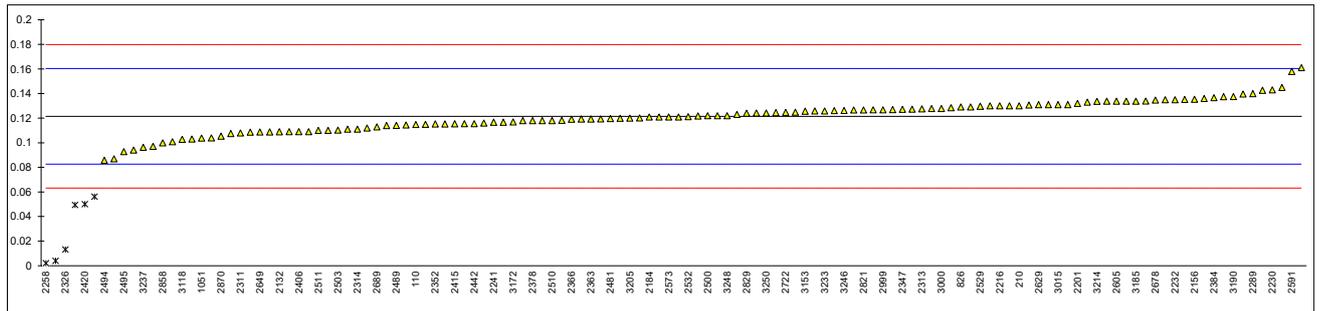
Lab 2326 first reported 0.1744

Lab 2363 first reported 1193 %M/M

Lab 2420 first reported 0.50

Lab 2503 first reported 1103 %M/M

Lab 2590 first reported 0.07362



## Determination of DNPP - Di-n-pentyl phthalate on sample #23611; results in %M/M

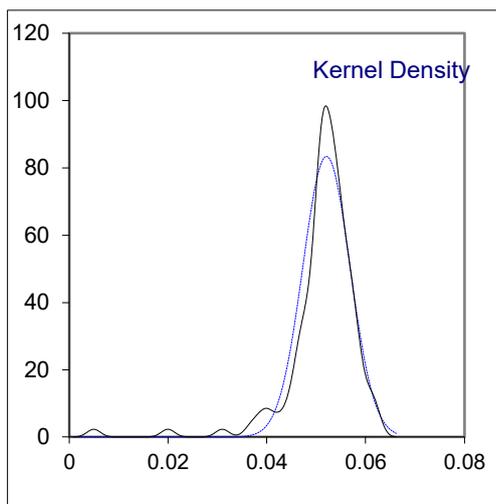
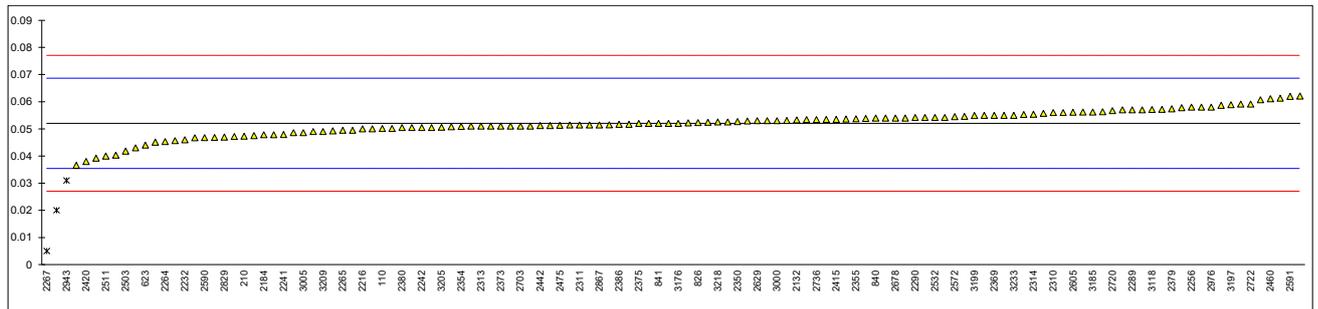
lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.0501		-0.24	2381	CPSC-CH-C1001-09.4	0.0505		-0.19
210	CPSC-CH-C1001-09.4	0.047291		-0.57	2384	In house	0.0534		0.16
339	In house	0.053478		0.17	2386	In house	0.0517		-0.04
452	CPSC-CH-C1001-09.4	0.051		-0.13	2387	IEC62321-8	----		----
523	CPSC-CH-C1001-09.4	0.0366		-1.86	2392	IEC62321-8	----		----
551		----		----	2406	CPSC-CH-C1001-09.4	0.0515		-0.07
623	In house	0.044		-0.97	2413	CPSC-CH-C1001-09.4	Not Det	f-?	----
815	IEC62321-8	0.0621		1.20	2415	CPSC-CH-C1001-09.4	0.0535		0.17
826	IEC62321-8	0.0523		0.03	2420	Other (mention below)	0.038	C	-1.69
840	CPSC-CH-C1001-09.4	0.054		0.23	2426	ISO14389	0.057		0.59
841	CPSC-CH-C1001-09.4	0.052		-0.01	2429	CPSC-CH-C1001-09.4	0.0591		0.84
1051	GB/T22048	0.0536		0.18	2431	CPSC-CH-C1001-09.3	0.0563		0.51
1910		----		----	2442	CPSC-CH-C1001-09.4	0.0512		-0.10
2102		----		----	2449		0.0505		-0.19
2104	CPSC-CH-C1001-09.4	0.0457		-0.76	2460	CPSC-CH-C1001-09.4	0.0611		1.08
2115		----		----	2474		----		----
2132	CPSC-CH-C1001-09.4	0.0533		0.15	2475	ISO8124-6	0.0513		-0.09
2137		----		----	2476		----		----
2146		----		----	2481		----		----
2156	IEC62321-8	0.0557		0.44	2489	CPSC	0.0580		0.71
2169		----		----	2494	CPSC-CH-C1001-09.4	0.0451		-0.84
2170		----		----	2495	CPSC-CH-C1001-09.4	0.0529		0.10
2176	In house	----		----	2500	CPSC-CH-C1001-09.4	0.051		-0.13
2182	CPSC-CH-C1001-09.4	0.0542		0.26	2503		0.0418	C	-1.23
2184	CPSC-CH-C1001-09.4	0.0478		-0.51	2507		----		----
2201	CPSC-CH-C1001-09.4	0.0607		1.04	2510		----		----
2202	IEC62321-8	----		----	2511	CPSC-CH-C1001-09.4	0.04		-1.45
2216	CPSC-CH-C1001-09.4	0.05		-0.25	2529	CPSC-CH-C1001-09.4	0.05717		0.61
2218	CPSC-CH-C1001-09.4	0.0546		0.30	2532	CPSC-CH-C1001-09.4	0.0542		0.26
2230	In house	0.0501		-0.24	2538		----		----
2232		0.0460		-0.73	2567	CPSC-CH-C1001-09.4	0.0553		0.39
2241	CPSC-CH-C1001-09.4	0.0479		-0.50	2569	ISO16181-1	0.054		0.23
2242	CPSC-CH-C1001-09.4	0.0505		-0.19	2572	CPSC-CH-C1001-09.4	0.0545		0.29
2247	CPSC-CH-C1001-09.4	0.055		0.35	2573	CPSC-CH-C1001-09.4	0.052		-0.01
2256	In house	0.058		0.71	2590	CPSC-CH-C1001-09.4	0.04676		-0.64
2258	CPSC-CH-C1001-09.4	not det	f-?	----	2591		0.062		1.19
2264	ISO14389/ GB/T20388	0.0453		-0.81	2605	CPSC-CH-C1001-09.4	0.0561		0.48
2265	CPSC-CH-C1001-09.4	0.0495		-0.31	2629	CPSC-CH-C1001-09.4	0.053		0.11
2267		0.005	R(0.01)	-5.65	2643		----		----
2284	CPSC-CH-C1001-09.4	0.0517		-0.04	2649	CPSC-CH-C1001-09.4	not det	f-?	----
2288	CPSC-CH-C1001-09.3	----		----	2678	CPSC-CH-C1001-09.4	0.054		0.23
2289	CPSC-CH-C1001-09.4	0.057		0.59	2689	CPSC-CH-C1001-09.3	0.0495		-0.31
2290	CPSC-CH-C1001-09.4	0.0542		0.26	2703	CPSC-CH-C1001-09.4	0.051		-0.13
2293	CPSC-CH-C1001-09.4	0.043		-1.09	2720		0.0567		0.56
2301		----	W	----	2722	CPSC-CH-C1001-09.4	0.0591		0.84
2310	CPSC-CH-C1001-09.4	0.056		0.47	2736	In house	0.0534		0.16
2311	CPSC-CH-C1001-09.4	0.0514		-0.08	2797	In house	----		----
2313	ISO14389	0.0510		-0.13	2821	In house	0.04720877		-0.58
2314	ISO8124-6	0.0554		0.40	2826		----		----
2316	IEC62321-8	----		----	2829		0.047		-0.61
2326	ISO14389	0.0392	C	-1.54	2835		----		----
2330	CPSC-CH-C1001-09.4	0.0562		0.50	2858	In house	0.051		-0.13
2347	CPSC-CH-C1001-09.4	0.0538		0.21	2867	CPSC-CH-C1001-09.4	0.0514		-0.08
2350	IEC62321-8	0.0527		0.08	2870	In house	0.0468		-0.63
2352	CPSC-CH-C1001-09.4	0.0514		-0.08	2885		----		----
2353	IEC	----		----	2931	In house	0.0613		1.11
2354	CPSC-CH-C1001-09.4	0.05088		-0.14	2943	D8133	0.031	C,R(0.01)	-2.53
2355	IEC62321-8	0.0537		0.20	2948	CPSC-CH-C1001-09.4	0.0522		0.02
2357	CPSC-CH-C1001-09.4	0.0514		-0.08	2959	CPSC-CH-C1001-09.4	0.056		0.47
2361	GB/T22048	----		----	2960	CPSC-CH-C1001-09.4	0.0530		0.11
2362	ISO8124-6	----		----	2976		0.058		0.71
2363	CPSC-CH-C1001-09.4	0.0508	C	-0.15	2977	CPSC-CH-C1001-09.3	0.0512		-0.10
2365	CPSC-CH-C1001-09.4	0.0500		-0.25	2998	EN62321-8	----		----
2366	CPSC-CH-C1001-09.4	0.0486		-0.42	2999	CPSC-CH-C1001-09.4	0.0531		0.12
2369	CPSC-CH-C1001-09.4	0.0550		0.35	3000	CPSC-CH-C1001-09.4	0.0530		0.11
2370	IEC62321-8	0.0510		-0.13	3005	In house	0.0486		-0.42
2373	CPSC-CH-C1001-09.4	0.0510		-0.13	3006		----		----
2375	CPSC-CH-C1001-09.4	0.052		-0.01	3015	CPSC-CH-C1001-09.4	0.057		0.59
2376	ST2016	----		----	3020	CPSC-CH-C1001-09.4	0.0403		-1.41
2378	GB/T22048	0.052		-0.01	3100	IEC62321-8	0.0578		0.69
2379	IEC62321-8	0.0574		0.64	3110		----		----
2380	CPSC-CH-C1001-09.4	0.05048		-0.19	3113		----		----

lab	method	Value	mark	z(targ)	lab	method	value	mark	z(targ)
3116		-----		-----	3210	In house	0.0478		-0.51
3118	CPSC-CH-C1001-09.3	0.0571		0.60	3214	CPSC-CH-C1001-09.4	0.05866		0.79
3153	CPSC-CH-C1001-09.4	0.0542		0.26	3218	CPSC-CH-C1001-09.4	0.0525		0.05
3163		0.02	R(0.01)	-3.85	3225	CPSC-CH-C1001-09.4	0.055		0.35
3166	In house	0.0475		-0.55	3233	CPSC-CH-C1001-09.4	0.0550		0.35
3172	ISO8124-6	0.0493		-0.33	3237		-----		-----
3176	EN14372	0.052		-0.01	3246	IEC62321-8	0.0525		0.05
3182	CPSC-CH-C1001-09.3	0.0490		-0.37	3247		-----		-----
3185	CPSC-CH-C1001-09.4	0.0562		0.50	3248	CPSC-CH-C1001-09.4	0.054		0.23
3190	CPSC-CH-C1001-09.4	0.0524		0.04	3250		0.0467		-0.64
3197	GB/T22048	0.0589		0.82	8005		-----		-----
3199	In house	0.0549		0.34	8008		-----		-----
3205	In house	0.0506		-0.18	8030	ISO8124-6	-----		-----
3209	CPSC-CH-C1001-09.4	0.049	C	-0.37					

normality suspect  
 n 125  
 outliers 3  
 mean (n) 0.05207  
 st.dev. (n) 0.004783 RSD = 9%  
 R(calc.) 0.01339  
 st.dev.(iis memo 1701) 0.008331  
 R(iis memo 1701) 0.02333

**f-? means Possibly a false negative test result?**

- Lab 2293 first reported 0
- Lab 2301 test result withdrawn, reported 0.0295
- Lab 2326 first reported 0.1254
- Lab 2363 first reported 508 %M/M
- Lab 2420 first reported 0.38
- Lab 2503 first reported 418 %M/M
- Lab 2943 first reported 0.040
- Lab 3020 first reported 0.0403
- Lab 3209 first reported 0.123



**APPENDIX 2**

BBP = Benzyl butyl phthalate  
 DEHP = Di-(2-ethylhexyl) phthalate  
 DBP = Dibutyl phthalate  
 DIDP = Di-iso-decyl phthalate  
 DINP = Di-iso-nonyl phthalate  
 DNOP = Di-n-octyl phthalate  
 DCHP = Dicyclohexyl phthalate  
 DEP = Diethyl phthalate  
 DMP = Dimethyl phthalate  
 DNHP = Di-n hexyl phthalate  
 DIBP = Di-iso-butyl phthalate  
 DNPP = Di-n-pentyl phthalate  
 DPrP = Di-n-propyl phthalate  
 DMEP = Di-(2-methoxyethyl) phthalate  
 Other = Total Other Phthalates

## Summary of other Phthalates in sample #23610: results in %M/M

lab	BBP	DBP	DINP	DNOP	DCHP	DMP
110	not detected	not analyzed				
210	----	----	0.045533	----	----	----
339	non détecté	non détecté	0.03234	non détecté	non détecté	non détecté
452	Not detected	----				
523	not detected	not analyzed				
551	----	----	----	----	----	----
623	Not Detected	Not Detected				
815	<0.005	<0.005	0.0166	<0.005	----	----
826	----	----	----	----	----	----
840	not detected	not detected				
841	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1051	----	----	----	----	----	----
1910	not detected	<LOQ	not detected	not detected	----	----
2102	Not detected	Not detected	Not detected	Not detected	Not analyzed	Not analyzed
2104	< 0.0005	< 0.0005	< 0.0030	< 0.0005	< 0.0005	< 0.0007
2115	----	0.08	----	----	----	----
2132	<0.01	<0.01	0.0151	<0.01	<0.01	N.A.
2137	----	----	----	----	----	----
2146	<0,1%	<0,1%	<0,1%	<0,1%	----	----
2156	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2169	<0.005	<0.005	<0.005	<0.005	----	----
2170	----	----	----	----	----	----
2176	not detected	not detected	not analyzed	not analyzed	not analyzed	not analyzed
2182	----	----	----	----	----	----
2184	not detected	not detected	0.0190	----	not detected	----
2201	not detected	not detected				
2202	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
2216	None Detected	----				
2218	----	----	----	----	----	----
2230	----	----	----	----	----	----
2232	----	----	----	----	----	----
2241	<0.0005	<0.0005	0.0186	<0.0005	<0.0005	<0.0005
2242	not detected	not detected	0.0372	not detected	not detected	not analyzed
2247	Not detected	Not detected				
2256	----	----	----	----	----	----
2258	not detected	not detected	not detected	0.006065	0.002026	not detected
2264	not detected	not detected				
2265	<0.01	C <0.01	C <0.01	C <0.01	C <0.01	C <0.01
2267	----	0.023	0.013	----	----	----
2284	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
2288	<0.01	<0.01	Unmeasured	Unmeasured	Unmeasured	Unmeasured
2289	----	----	----	----	----	----
2290	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2293	0	0	0.021	0	0	0
2301	----	----	----	----	----	----
2310	not detected	not detected	0.017	not detected	not detected	not detected
2311	Not Detected	Not Detected	0.0187	Not Detected	Not Detected	Not Detected
2313	Not Detected	Not Detected	0.0176	Not Detected	Not Detected	Not Detected
2314	----	----	----	----	----	----
2316	not detected	not detected	not detected	not detected	not applicable	not applicable
2326	ND	ND	ND	ND	ND	ND

lab	BBP	DBP	DINP	DNOP	DCHP	DMP
2330	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2347	<0.0050	<0.0050	<0.0100	<0.0050	<0.0050	<0.0050
2350	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2352	----	----	----	----	----	----
2353	not detected	not detected	0.019883	not detected	not determined	not determined
2354	not detected	not detected	0.02124	not determined	not detected	not determined
2355	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
2357	----	----	----	----	----	----
2361	not detected	not detected	0.01935	not detected	not determined	not determined
2362	not detected	not detected	0.01935	not detected	not determined	not determined
2363	not detected	not detected	not detected	not detected	not detected	not detected
2365	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
2366	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
2369	<0.005%	<0.005%	<0.005%	<0.005%	<0.005%	<0.005%
2370	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
2373	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2375	----	----	----	----	----	----
2376	not detected	not detected	0.02091	not detected	----	----
2378	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001
2379	Not detected	Not detected	Not detected	Not detected	Not Analyzed	Not Analyzed
2380	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2381	----	----	----	----	----	----
2384	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2386	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2387	Not Detected	Not Detected	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
2392	not detected	not detected	not detected	not detected	not determined	not determined
2406	not detected	not detected	not detected	not detected	not detected	----
2413	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2415	----	----	----	----	----	----
2420	not detected	not detected	not detected	not detected	not detected	not analyzed
2426	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2429	----	----	----	----	----	----
2431	----	----	0.0409	----	----	----
2442	Not Detected	Not Detected	0.0214	Not Detected	Not Detected	Not Detected
2449	----	----	----	----	----	----
2460	0.0	0.0	0	C	0.0	----
2474	----	----	----	----	----	----
2475	----	----	----	----	----	----
2476	----	----	----	----	----	----
2481	Not detected	Not detected	Not detected	Not detected	Not detected	Not analyzed
2489	Not Detected	Not Detected	Not Detected	----	Not Detected	Not Detected
2494	not detected	not detected	not detected	not detected	not detected	not detected
2495	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
2500	ND	ND	ND	ND	ND	ND
2503	----	----	----	----	----	----
2507	<0.100	<0.100	<0.100	<0.100	----	----
2510	----	----	----	----	----	----
2511	----	----	----	----	----	----
2529	----	----	----	----	----	----
2532	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2538	not detected	not detected	not detected	not detected	----	----
2567	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%
2569	NOT DETECTED	NOT DETECTED	0.015	NOT DETECTED	NOT DETECTED	NOT DETECTED
2572	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2573	----	----	----	----	----	----
2590	----	----	----	----	----	----
2591	not detected	not detected	0.032	not detected	not detected	not detected
2605	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
2629	< 10 mg/kg	< 10 mg/kg	< 10 mg/kg	< 10 mg/kg	< 10 mg/kg	< 10 mg/kg
2643	----	----	----	----	----	----
2649	not detected	not detected	not detected	not detected	not detected	not detected
2678	Not Detected	Not Detected	0.0207	----	Not detected	----
2689	not detected	not detected	not detected	not detected	not detected	not detected
2703	Not detected	Not Detected	Not detected	Not Detected	Not Detected	0.001
2720	not detected	not detected	not detected	not detected	not detected	not detected
2722	<0.02	<0.02	<0.02	----	<0.02	----
2736	<0.01	<0.01	<0.01	----	<0.01	----
2797	Not detected	0.00160	Not detected	Not detected	Not analyzed	Not analyzed
2821	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05
2826	Not detected	Not detected	----	----	----	----
2829	not detected	not detected	0.03	not detected	not detected	not detected
2835	NOT DETECTED	NOT DETECTED	NOT DETECTED	NOT DETECTED	----	NOT DETECTED
2858	not detected	not detected	not detected	not detected	not detected	not detected
2867	not detected	not detected	not detected	not detected	not detected	not detected
2870	----	----	----	----	----	----
2885	N.D.	N.D.	N.D.	N.D.	----	----
2931	not detected	0.0015	not detected	not detected	----	0.0012

lab	BBP	DBP	DINP	DNOP	DCHP	DMP
2943	Not quantifiable	Not quantifiable	Not quantifiable	Not quantifiable	Not quantifiable	Not quantifiable
2948	not detected	not detected	0.009	not detected	not detected	not detected
2959	----	----	----	----	----	----
2960	not detected	not detected	not detected	not detected	not detected	not detected
2976	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2977	not detected	not detected	not detected	not detected	not determined	not determined
2998	not detected	0.0021	0.0072	not detected	not analyzed	0.0005
2999	----	----	----	----	----	----
3000	----	----	----	----	----	----
3005	----	----	----	----	----	----
3006	<0.01	<0.01	----	----	----	----
3015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3020	----	----	----	----	----	----
3100	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3110	----	----	----	----	----	----
3113	----	----	----	----	----	----
3116	----	----	----	----	----	----
3118	----	----	----	----	----	----
3153	----	----	----	----	----	----
3163	0.09	0.09	----	----	----	----
3166	Not detected	Not detected	Not detected	Not detected	Not determined	Not detected
3172	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3176	----	----	----	----	----	----
3182	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
3185	not detect[<0.01]	not detected[<0.01]	not detected[<0.01]	----	not detected[<0.01]	----
3190	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3197	<0,003	<0,003	<0,003	<0,003	<0,003	<0,003
3199	<0.005	<0.005	0.0217	<0.005	<0.005	<0.005
3205	<0.05	<0.05	<0.05	<0.05	<0.05	----
3209	----	----	0.0152	----	----	----
3210	----	----	0.0151	----	----	----
3214	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3218	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
3225	<0.03	<0.03	<0.03	N/A	<0.03	N/A
3233	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3237	----	----	----	----	----	----
3246	not detected	not detected	not analyzed	not detected	not detected	not detected
3247	----	----	----	----	----	----
3248	----	----	----	----	----	----
3250	----	----	----	----	----	----
8005	----	----	----	----	----	----
8008	----	----	0.0254	----	----	----
8030	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

Lab 2265 first reported <100%M/M for all corrections

Lab 2460 first reported 0.4762

Summary of other Phthalates in sample #23610; results in %M/M – continued

lab	DNHP	DNPP	DPrP	DMEP	Other
110	not detected	not detected	not analyzed	not analyzed	0.8474
210	----	----	----	----	----
339	non détecté				
452	Not detected	Not detected	----	----	----
523	not analyzed	not detected	not analyzed	not analyzed	not detected
551	----	----	----	----	----
623	Not Detected				
815	<0.005	<0.005	----	----	----
826	----	----	----	----	----
840	not detected	not detected	not detected	not detected	----
841	<0.003	<0.003	<0.003	<0.003	----
1051	----	----	----	----	----
1910	----	----	----	----	----
2102	Not analyzed				
2104	< 0.0005	< 0.0005	----	< 0.0010	< 0.0050
2115	----	----	----	----	----
2132	<0.01	<0.01	N.A.	N.A.	N.A.
2137	----	----	----	----	----
2146	----	----	----	----	----
2156	<0.02	<0.02	----	<0.02	----
2169	----	----	----	----	----
2170	----	----	----	----	----
2176	not analyzed				
2182	----	----	----	----	----
2184	not detected	not detected	----	----	----
2201	not detected	not detected	not detected	not detected	1.0759
2202	N.D.	N.D.	N.D.	N.D.	N.D.
2216	None Detected	None Detected	----	----	----
2218	----	----	----	----	----
2230	----	----	----	----	----
2232	----	----	----	----	----
2241	<0.0005	<0.0005	<0.0005	<0.0005	----
2242	not detected	not detected	not analyzed	not analyzed	not applicable
2247	Not detected				
2256	----	----	----	----	----
2258	not detected				
2264	not detected				
2265	<0.01 C				
2267	----	----	----	----	----
2284	<0.0050	<0.0050	<0.0050	<0.0050	NA
2288	Unmeasured	Unmeasured	Unmeasured	Unmeasured	Unmeasured
2289	----	----	----	----	----
2290	<0.01	<0.01	<0.01	<0.01	----
2293	0	0	0	0	0
2301	----	----	----	----	----
2310	not detected	not detected	not detected	not detected	----
2311	Not Detected	Not Detected	Not Detected	Not Detected	----
2313	Not Detected				
2314	----	----	----	----	----
2316	not applicable	not applicable	not applicable	not applicable	not detected
2326	ND	ND	ND	ND	ND
2330	Not detected	Not detected	Not detected	Not detected	Not analyzed
2347	<0.0050	<0.0050	<0.0050	<0.0050	----
2350	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2352	----	----	----	----	----
2353	not determined				
2354	not detected	not detected	not determined	not determined	not determined
2355	<0.0050	<0.0050	<0.0050	<0.0050	----
2357	----	----	----	----	----
2361	not determined				
2362	not determined				
2363	not detected				
2365	<0.0050	<0.0050	<0.0050	<0.0050	----
2366	<0.015	<0.015	<0.015	<0.015	not analysed
2369	<0.005%	<0.005%	<0.005%	<0.005%	<0.005%
2370	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
2373	<0.005	<0.005	<0.005	<0.005	1.0419
2375	----	----	----	----	----
2376	----	----	----	----	----
2378	<0.001	<0.001	<0.001	<0.001	<0.001
2379	Not detected	Not detected	Not Analyzed	Not detected	Not Analyzed
2380	<0.005	<0.005	<0.005	<0.005	<0.005
2381	----	----	----	----	----
2384	Not detected	Not detected	Not detected	Not detected	----

lab	DNHP	DNPP	DPrP	DMEP	Other
2386	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2387	Not Analyzed				
2392	not determined	not determined	not determined	not determined	not analyzed
2406	not detected	not detected	----	----	----
2413	Not Detected				
2415	----	----	----	----	----
2420	not detected	not detected	not analyzed	not detected	not analyzed
2426	Not Detected				
2429	----	----	----	----	----
2431	----	----	----	----	----
2442	Not Detected	Not Detected	Not Detected	Not Detected	----
2449	----	----	----	----	----
2460	0.0	0.0	----	----	----
2474	----	----	----	----	----
2475	----	----	----	----	----
2476	----	----	----	----	----
2481	Not analyzed	Not analyzed	Not analyzed	Not detected	----
2489	Not Detected	Not Detected	Not Detected	Not Detected	----
2494	not detected	not detected	not detected	not detected	not analyzed
2495	<0.003	<0.003	<0.003	<0.003	----
2500	ND	ND	ND	ND	NA
2503	----	----	----	----	----
2507	----	----	----	----	----
2510	----	----	----	----	----
2511	----	----	----	----	----
2529	----	----	----	----	----
2532	Not Detected				
2538	----	----	----	----	----
2567	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%
2569	NOT DETECTED	NOT DETECTED	NOT DETECTED	NOT DETECTED	----
2572	<0.01	<0.01	<0.01	<0.01	<0.01
2573	----	----	----	----	----
2590	----	----	----	----	----
2591	not detected				
2605	<0.0100	<0.0100	<0.0100	<0.0100	----
2629	< 10 mg/kg				
2643	----	----	----	----	----
2649	not detected				
2678	Not Detected	Not Detected	----	----	----
2689	not detected				
2703	Not detected	Not detected	----	Not Detected	----
2720	not detected	not detected	not detected	not detected	not analyzed
2722	<0.02	<0.02	----	----	----
2736	<0.01	<0.01	----	----	----
2797	Not analyzed				
2821	<0.02	<0.05	<0.05	<0.05	----
2826	----	----	----	----	Not detected
2829	not detected	not detected	not analyzed	not detected	----
2835	----	----	----	----	----
2858	not detected				
2867	not detected	not detected	not detected	not detected	----
2870	----	----	----	----	----
2885	----	----	----	----	----
2931	not detected	not detected	----	not detected	----
2943	Not quantifiable				
2948	not detected	not detected	not detected	not detected	1.0367
2959	----	----	----	----	----
2960	not detected				
2976	Not Detected				
2977	not detected	not detected	not determined	not detected	not determined
2998	not analyzed				
2999	----	----	----	----	----
3000	----	----	----	----	----
3005	----	----	----	----	----
3006	----	----	----	----	----
3015	<0.01	<0.01	<0.01	<0.01	<0.01
3020	----	----	----	----	----
3100	<0.010	<0.010	<0.010	<0.010	--
3110	----	----	----	----	----
3113	----	----	----	----	----
3116	----	----	----	----	----
3118	----	----	----	----	----
3153	----	----	----	----	----
3163	----	----	----	----	----
3166	Not detected	Not detected	Not determined	Not determined	Not determined
3172	< 0.005	< 0.005	< 0.005	< 0.005	----
3176	----	----	----	----	----
3182	Not detected				

lab	DNHP	DNPP	DPrP	DMEP	Other
3185	not detected[<0.01]	not detected[<0.01]	----	----	----
3190	<0.01	<0.01	<0.01	<0.01	----
3197	<0,003	<0,003	<0,003	<0,003	<0,003
3199	<0.005	<0.005	<0.005	<0.005	----
3205	<0.05	<0.05	<0.05	----	----
3209	----	----	----	----	----
3210	----	----	----	----	----
3214	<0.005	<0.005	<0.005	<0.005	1.08601
3218	<0.0100	<0.0100	<0.0100	<0.0100	1.0406
3225	<0.03	<0.03	N/A	N/A	----
3233	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
3237	----	----	----	----	----
3246	not detected	not detected	not detected	not detected	not analyzed
3247	----	----	----	----	----
3248	----	----	----	----	----
3250	----	----	----	----	----
8005	----	----	----	----	----
8008	----	----	----	----	----
8030	Not detected	Not detected	Not detected	Not detected	Not Analyzed

Lab 2265 first reported <100%M/M for all corrections

## Summary of other Phthalates in sample #23611: results in %M/M

lab	BBP	DEHP	DIDP	DINP	DEP	DMP
110	not detected	not detected	not detected	not detected	not detected	not analyzed
210	----	----	----	----	----	0.007849
339	non détecté	non détecté	non détecté	non détecté	non détecté	0.009383
452	Not detected	Not detected	Not detected	Not detected	----	----
523	not detected	not detected	not detected	not detected	not analyzed	not analyzed
551	----	----	----	----	----	----
623	Not Detected	Not Detected	Not Detected	Not Detected	0.004	0.010
815	<0.005	<0.005	<0.005	<0.005	<0.005	----
826	----	----	----	----	----	0.0158
840	not detected	not detected	not detected	not detected	not detected	0.012
841	<0.003	<0.003	<0.003	<0.003	<0.003	0.013
1051	----	----	----	----	----	----
1910	not detected	not detected	not detected	not detected	----	----
2102	Not detected	Not detected	Not detected	Not detected	Not analyzed	Not analyzed
2104	< 0.0005	< 0.0005	< 0.0030	< 0.0030	0.0009	0.0117
2115	----	----	----	----	----	----
2132	<0.01	<0.01	<0.01	<0.01	N.A.	N.A.
2137	----	----	----	----	----	----
2146	<0,1%	<0,1%	<0,1%	<0,1%	----	----
2156	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
2169	<0.005	<0.005	<0.005	<0.005	<0.005	----
2170	----	----	----	----	----	----
2176	not detected	not detected	not analyzed	not analyzed	not analyzed	not analyzed
2182	----	----	----	----	----	----
2184	not detected	not detected	----	not detected	----	----
2201	not detected	not detected	not detected	not detected	not detected	not detected
2202	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
2216	None Detected	None Detected	None Detected	None Detected	----	----
2218	----	----	----	----	----	----
2230	----	----	----	----	----	0.0191
2232	----	----	----	----	----	----
2241	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0142
2242	not detected	not detected	not detected	not detected	not analyzed	not analyzed
2247	Not detected	Not detected	Not detected	Not detected	Not detected	0.018
2256	----	----	----	----	----	----
2258	not detected	0.016643	not detected	not detected	not detected	not detected
2264	not detected	not detected	not detected	not detected	not detected	not detected
2265	<0.01	C <0.01	C <0.01	C <0.01	C <0.01	C 0.0158
2267	----	----	----	----	----	----
2284	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0086
2288	<0.01	0.17790	Unmeasured	Unmeasured	Unmeasured	Unmeasured
2289	----	----	----	----	----	----
2290	<0.01	<0.01	<0.01	<0.01	<0.01	0.0233
2293	0	0	0	0	0	0.0032
2301	----	----	----	----	----	0.0097
2310	not detected	not detected	not detected	not detected	not detected	0.015
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.0163
2313	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	0.0157
2314	----	----	----	----	----	0.0162
2316	not detected	not detected	not detected	not detected	not applicable	not applicable
2326	ND	ND	ND	ND	ND	0.0132
2330	Not detected	Not detected	Not detected	Not detected	Not detected	0.0141
2347	<0.0050	<0.0050	<0.0100	<0.0100	<0.0050	0.0114
2350	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0155
2352	----	----	----	----	----	0.0107
2353	not detected	not detected	not detected	not detected	not determined	not determined
2354	not detected	not detected	not determined	not detected	not determined	not determined
2355	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0103
2357	----	----	----	----	----	0.0099
2361	not detected	not detected	not detected	not detected	not determined	not determined
2362	not detected	not detected	not detected	not detected	not determined	not determined
2363	not detected	not detected	not detected	not detected	not detected	0.0104
2365	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0105
2366	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
2369	<0.005%	<0.005%	<0.005%	<0.005%	<0.005%	0.0099
2370	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0125
2373	<0.005	<0.005	<0.005	<0.005	<0.005	0.0104
2375	----	----	----	----	----	0.011
2376	not detected	not detected	not detected	not detected	not determined	not determined
2378	<0.001	<0.001	<0.001	<0.005	<0.001	0.0102
2379	Not detected	Not detected	Not detected	Not detected	Not detected	0.0114
2380	<0.005	<0.005	<0.005	<0.005	<0.005	0.02050
2381	----	----	----	----	----	0.0204
2384	Not detected	Not detected	Not detected	Not detected	Not detected	0.0142

lab	BBP	DEHP	DIDP	DINP	DEP	DMP
2386	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.014
2387	Not Detected	Not Detected	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
2392	not detected	not detected	not detected	not detected	not determined	not determined
2406	not detected	not detected	not detected	not detected	----	----
2413	Not Detected					
2415	----	----	----	----	----	0.0122
2420	not detected	not analyzed				
2426	Not Detected					
2429	----	----	----	----	----	----
2431	----	----	----	----	----	----
2442	Not Detected	0.0226				
2449	----	----	----	----	----	0.018
2460	0.0	0.0	----	0.0	----	----
2474	----	----	----	----	----	----
2475	----	----	----	----	----	----
2476	----	----	----	----	----	----
2481	Not detected	Not detected	Not detected	Not detected	Not analyzed	Not analyzed
2489	Not Detected	0.0179				
2494	not detected					
2495	<0.003	<0.003	<0.003	<0.003	<0.003	----
2500	ND	ND	ND	ND	ND	0.011
2503	----	----	----	----	----	0.0089
2507	<0.100	<0.100	<0.100	----	----	----
2510	----	----	----	----	----	0.007
2511	----	----	----	----	----	----
2529	----	----	----	----	----	----
2532	Not Detected	0.0187				
2538	not detected	not detected	not detected	not detected	----	----
2567	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%	0.0241
2569	NOT DETECTED	0.018				
2572	<0.01	<0.01	<0.01	<0.01	<0.01	0.0225
2573	----	----	----	----	----	----
2590	----	----	----	----	----	0.00459
2591	not detected	0.023				
2605	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
2629	< 10 mg/kg	0.0151				
2643	----	----	----	----	----	----
2649	not detected	not detected	not detected	not detected	0.0226	not detected
2678	Not Detected	Not Detected	----	Not Detected	----	----
2689	not detected					
2703	Not Detected	Not Detected	Not Detected	Not Detected	0.0335	0.3472
2720	not detected					
2722	<0.02	<0.02	----	<0.02	----	----
2736	<0.01	<0.01	----	<0.01	----	----
2797	Not detected	0.001355	Not detected	Not detected	Not analyzed	Not analyzed
2821	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05
2826	Not detected	Not detected	----	----	----	----
2829	not detected					
2835	NOT DETECTED	0.012343				
2858	not detected	0.021				
2867	not detected					
2870	----	----	----	----	----	----
2885	N.D.	N.D.	N.D.	N.D.	----	----
2931	not detected	0.0009	not detected	not detected	0.0014	0.0243
2943	Not quantifiable					
2948	not detected					
2959	----	----	----	----	----	----
2960	not detected					
2976	Not Detected	0.005				
2977	not detected	not detected	<100	not detected	not determined	not determined
2998	not detected	not detected	not detected	not detected	0.0060	0.0047
2999	----	----	----	----	----	----
3000	----	----	----	----	----	----
3005	----	----	----	----	----	----
3006	<0.01	<0.01	----	----	----	----
3015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3020	----	----	----	----	----	0.0048
3100	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3110	----	----	----	----	----	----
3113	----	----	----	----	----	----
3116	----	----	----	----	----	----
3118	----	----	----	----	----	----
3153	----	----	----	----	----	----
3163	----	----	----	----	----	0.01
3166	Not detected	0.0071				
3172	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3176	----	----	----	----	----	0.010
3182	Not detected	<0.1125				

C

lab	BBP	DEHP	DIDP	DINP	DEP	DMP
3185	not detected[<0.01]	not detected[<0.01]	----	not detected[<0.01]	----	----
3190	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3197	<0,003	<0,003	<0,003	<0,003	<0,003	<0,003
3199	<0.005	<0.005	<0.005	<0.005	<0.005	0.0154
3205	<0.05	<0.05	<0.05	<0.05	<0.05	----
3209	----	----	----	----	----	----
3210	----	----	----	----	----	0.0086
3214	<0.005	<0.005	<0.005	<0.005	<0.005	0.01200
3218	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
3225	<0.03	<0.03	N/A	<0.03	N/A	N/A
3233	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0124
3237	----	----	----	----	----	----
3246	not detected	not detected	not detected	not detected	not detected	0.0130
3247	----	----	----	----	----	----
3248	----	----	----	----	----	----
3250	----	----	----	----	----	0.0199
8005	----	----	----	----	----	----
8008	----	----	----	----	----	----
8030	Not detected	Not detected	Not detected	Not detected	Not Analyzed	Not Analyzed

Lab 2265 first reported <100%M/M for all corrections

Lab 2293 first reported 0

Lab 2363 first reported 104 %M/M

Lab 2503 first reported 89 %M/M

## Summary of other Phthalates in sample #23611; results in %M/M – continued

lab	DNHP	DIBP	DPPrP	DMEP	Other
110	not detected	not detected	not analyzed	not analyzed	0.3430
210	----	----	----	----	----
339	non détecté				
452	Not detected	Not detected	----	----	----
523	not analyzed	not detected	not analyzed	not analyzed	not detected
551	----	----	----	----	----
623	Not Detected				
815	<0.005	<0.005	----	----	----
826	----	----	----	----	----
840	not detected	not detected	not detected	not detected	----
841	<0.003	<0.003	<0.003	<0.003	----
1051	----	----	----	----	----
1910	----	not detected	----	----	----
2102	Not analyzed	Not detected	Not analyzed	Not analyzed	Not analyzed
2104	< 0.0005	0.0011	----	< 0.0010	< 0.0050
2115	----	0.119	----	----	----
2132	<0.01	<0.01	N.A.	N.A.	N.A.
2137	----	----	----	----	----
2146	----	<0,1%	----	----	----
2156	<0.02	<0.02	----	<0.02	----
2169	----	<0.005	----	----	----
2170	----	----	----	----	----
2176	not analyzed	not detected	not analyzed	not analyzed	not analyzed
2182	----	----	----	----	----
2184	not detected	not detected	----	----	----
2201	not detected	not detected	not detected	not detected	0.5018
2202	N.D.	N.D.	N.D.	N.D.	N.D.
2216	None Detected	None Detected	----	----	----
2218	----	----	----	----	----
2230	----	----	----	----	----
2232	----	----	----	----	----
2241	<0.0005	<0.0005	<0.0005	<0.0005	----
2242	not detected	not detected	not analyzed	not analyzed	not applicable
2247	Not detected				
2256	----	----	----	----	----
2258	not detected	0.001886	not detected	not detected	not detected
2264	not detected				
2265	<0.01	<0.01	<0.01	<0.01	<0.01
2267	----	----	----	----	----
2284	<0.0050	<0.0050	<0.0050	<0.0050	NA
2288	Unmeasured	<0.01	Unmeasured	Unmeasured	Unmeasured
2289	----	----	----	----	----
2290	<0.01	<0.01	<0.01	<0.01	----
2293	0	0	0	0	0.041
2301	----	----	----	----	----
2310	not detected	not detected	not detected	not detected	----
2311	Not Detected	Not Detected	Not Detected	Not Detected	----
2313	Not Detected				
2314	----	----	----	----	----
2316	not applicable	not detected	not applicable	not applicable	not detected
2326	ND	ND	ND	ND	ND
2330	Not detected	Not detected	Not detected	Not detected	Not analyzed
2347	<0.0050	<0.0050	<0.0050	<0.0050	----
2350	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
2352	----	----	----	----	----
2353	not determined	not detected	not determined	not determined	not determined
2354	not detected	not detected	not determined	not determined	----
2355	<0.0050	<0.0050	<0.0050	<0.0050	----
2357	----	----	----	----	----
2361	not determined	not detected	not determined	not determined	not determined
2362	not determined	not detected	not determined	not determined	not determined
2363	not detected				
2365	<0.0050	<0.0050	<0.0050	<0.0050	----
2366	<0.015	<0.015	<0.015	<0.015	not analysed
2369	<0.005%	<0.005%	<0.005%	<0.005%	<0.005%
2370	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
2373	<0.005	<0.005	<0.005	<0.005	0.4736
2375	----	----	----	----	----
2376	not determined				
2378	<0.001	<0.001	<0.001	<0.001	<0.001
2379	Not detected	Not detected	Not detected	Not detected	Not Analyzed
2380	<0.005	<0.005	<0.005	<0.005	<0.005
2381	----	----	----	----	----
2384	Not detected	Not detected	Not detected	Not detected	Not analyzed

lab	DNHP	DIBP	DPpP	DMEP	Other
2386	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2387	Not Analyzed	Not Detected	Not Analyzed	Not Analyzed	Not Analyzed
2392	not determined	not detected	not determined	not determined	not analyzed
2406	not detected	not detected	----	----	----
2413	Not Detected				
2415	----	----	----	----	----
2420	not detected	not detected	not analyzed	not detected	not analyzed
2426	Not Detected				
2429	----	----	----	----	----
2431	----	----	----	----	----
2442	Not Detected	Not Detected	Not Detected	Not Detected	----
2449	----	----	----	----	----
2460	0.0	0	----	----	----
2474	----	----	----	----	----
2475	----	----	----	----	----
2476	----	----	----	----	----
2481	Not analyzed	Not detected	Not analyzed	Not detected	----
2489	Not Detected	Not Detected	Not Detected	Not Detected	----
2494	not detected	not detected	not detected	not detected	not analyzed
2495	<0.003	<0.003	<0.003	<0.003	----
2500	ND	ND	ND	ND	NA
2503	----	----	----	----	----
2507	----	<0.100	----	----	----
2510	----	----	----	----	----
2511	----	----	----	----	----
2529	----	----	----	----	----
2532	Not Detected				
2538	----	not detected	----	----	----
2567	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%
2569	NOT DETECTED	NOT DETECTED	NOT DETECTED	NOT DETECTED	----
2572	<0.01	<0.01	<0.01	<0.01	<0.01
2573	----	----	----	----	----
2590	----	----	----	----	----
2591	not detected				
2605	<0.0100	<0.0100	<0.0100	<0.0100	----
2629	< 10 mg/kg				
2643	----	----	----	----	----
2649	not detected				
2678	Not Detected	Not Detected	----	----	----
2689	not detected				
2703	Not Detected	0.001	----	Not Detected	----
2720	not detected	not detected	not detected	not detected	not analyzed
2722	<0.02	<0.02	----	----	----
2736	<0.01	<0.01	----	----	----
2797	Not analyzed				
2821	<0.02	<0.05	<0.05	<0.05	----
2826	----	Not detected	----	----	Not detected
2829	not detected	not detected	not analyzed	not detected	----
2835	----	NOT DETECTED	----	----	----
2858	not detected				
2867	not detected	not detected	not detected	not detected	----
2870	----	----	----	----	----
2885	----	N.D.	----	----	----
2931	not detected	0.0038	----	not detected	1.4617
2943	Not quantifiable				
2948	not detected	not detected	not detected	not detected	0.4555
2959	----	----	----	----	----
2960	not detected				
2976	Not Detected				
2977	not detected	0.0010	not determined	not detected	not determined
2998	not analyzed				
2999	----	----	----	----	----
3000	----	----	----	----	----
3005	----	----	----	----	----
3006	----	<0.01	----	----	----
3015	<0.01	<0.01	<0.01	<0.01	<0.01
3020	----	----	----	----	5.3400
3100	<0.010	<0.010	<0.010	<0.010	--
3110	----	----	----	----	----
3113	----	----	----	----	----
3116	----	----	----	----	----
3118	----	----	----	----	----
3153	----	----	----	----	----
3163	----	----	----	----	----
3166	Not detected	Not detected	Not determined	Not determined	Not determined
3172	< 0.005	< 0.005	< 0.005	< 0.005	----
3176	----	----	----	----	----
3182	Not detected				

lab	DNHP	DIBP	DPrP	DMEP	Other
3185	not detected[<0.01]	not detected[<0.01]	----	----	----
3190	<0.01	<0.01	<0.01	<0.01	----
3197	<0,003	<0,003	<0,003	<0,003	<0,003
3199	<0.005	<0.005	<0.005	<0.005	----
3205	<0.05	<0.05	<0.05	----	----
3209	----	----	----	----	----
3210	----	----	----	----	----
3214	<0.005	<0.005	<0.005	<0.005	0.49987
3218	<0.0100	<0.0100	<0.0100	<0.0100	0.4679
3225	<0.03	<0.03	N/A	N/A	----
3233	< 0.01	< 0.01	< 0.01	< 0.01	DEHT = 22.9389
3237	----	----	----	----	----
3246	not detected	not detected	not detected	not detected	not analyzed
3247	----	----	----	----	----
3248	----	----	----	----	----
3250	----	----	----	----	----
8005	----	----	----	----	----
8008	----	----	----	----	----
8030	Not Analyzed	Not detected	Not Analyzed	Not Analyzed	Not Analyzed

Lab 2265 first reported <100%M/M for all corrections

## APPENDIX 3 Analytical details

lab	ISO17025 accredited	sample further grinded or cut	sample intake (g)	extraction solvent	extraction time (min)	extraction temp (°C)
110	Yes	Further cut	0.15 g	tetrahydrofuran (THF)	sonicate for 2hr	RT (20°+5°) Celsius
210	Yes	Further cut				
339	No	Used as received	0.1	tétrahydrofurane	60	60
452	Yes	Further cut	0.1g	THF/Hexane	60 minutes	60
523	Yes	Further cut	0.5g	THF:ACN	60 min	25°C
551	---	---				
623	Yes	Further cut	0.1 gram	THF Hexane	60	60
815	Yes	---	0.2g	Hexane	60minutes	140°C
826	Yes	Used as received	0.3 g	THF	60 min	40 °C
840	Yes	Further cut	0.1	THF:HEXAN	60	60
841	Yes	Further cut	0.1g	THF	60min	60°C
1051	Yes	Further cut	1g	Dichloromethane	360 mins	number of cycle at least 4 times per hour.
1910	Yes	Used as received	1 g	dichloromethane	180 min	Soxtec Extraction
2102	Yes	Used as received	0.15 gram	THF/hexane (1:2)	30	roomtemperature
2104	Yes	Used as received				
2115	Yes	Used as received	0.05 g	THF /Hexane	150 min	25°C
2132	Yes	Used as received	0.05g	THF	150 minutes	Room temperature
2137	Yes	Used as received	0.3 g	THF, ACN	60 MIN	40
2146	Yes	Further cut	0,05 G	THF/Hexane	180 min	RT to about 40°C.
2156	Yes	Further cut	0.3 g	Tetrahydrofuran : Acetonitrile (1:2)	60 minutes	Room Temperature
2169	Yes	Further cut	0.3 g	THF / Acetonitrile	60 min	
2170	---	---				
2176	Yes	Further grinded	0.1 gram/data	THF and Toluene	30 minutes	Room temperature
2182	Yes	Further cut	0.05±	THF	30min	60
2184	Yes	---	not applicable	not applicable	not applicable	not applicable
2201	Yes	Further cut	0.050g	TFH	30min	70 °C
2202	Yes	Used as received	0.5g	THF	12hrs	room temperature
2216	Yes	Further grinded	#23610 - 0.2928 #23611 - 0.2939	5 mL THF	120	Ambient temperature
2218	Yes	Further cut	0.05	THF/Hexane	120	40
2230	Yes	Used as received	0.3g	thf	60	40
2232	Yes	Used as received	0.3	THF	30	40C
2241	Yes	Used as received	0.5g.	DCM.	60 mins.	60°C.
2242	Yes	Used as received	0.1	THF and Hexane 1:2	150	23
2247	Yes	Further cut	Approx. 0.5gm	THF:Hexane	30.0	Room Temperature
2256	Yes	Further cut	0.3004g	THF	60min	40°C
2258	Yes	Used as received	23610 0.0684 gm 23611 0.029 gm	tetrahydrofurano THF & acetonitrile ACN	120	40
2264	Yes	Further cut	0.15	THF / HEXANE	60	60
2265	Yes	Used as received	0,1	THF Hexan	60	60
2267	No	Further cut	1	Hexaan	360	
2284	Yes	Used as received	#23610:0.3186g #23611:0.3003g	tetrahydrofuran/hexane (1:2)	60mins	60
2288	No	Further grinded	0.1g	THF	60min	room temperature
2289	Yes	Further cut	0.05g	TFH	30min	Room
2290	Yes	---				
2293	Yes	Further grinded	0.1 GRAMS	5 mL THF/ 10 mL HEXANE	120 minutes	Room temperature
2301	Yes	Used as received	0.3 gram	THF/ACN	60 min	70°C
2310	Yes	Further cut	0.1 gram	THF/Hexane	60	60
2311	Yes	Further cut	0.1	THF/Hexane	60	60
2313	Yes	Further cut	0.3g	THF/Hexane	60 min	60 °C
2314	Yes	Further cut	0.10g	THF and n-Hexane	60 minutes	60°C
2316	Yes	Further grinded	0.3 gram	Tetrahydrofuran, Acetonitrile	60 minutes	--
2326	Yes	Further cut	0.1 gm	Tetrahydrofurane & n-Hexane	60 min	60 C
2330	Yes	Further cut	0.05 g	THF:Hexance	30 min	40 C
2347	Yes	Further grinded	0.1±0.01g	/	60mins	60°C
2350	Yes	Used as received	0.3 g	THF/ACN	60 min	40 °C
2352	Yes	Further cut	0.1g	THF+HEXANE	30min	/
2353	Yes	Used as received	0.3	hexane. ACN	60	50
2354	Yes	Used as received	0.05	THF, n-hexane	90	room temp
2355	Yes	Further cut	0.3g	Tetrahydrofurane	60min	60°C
2357	---	---				
2361	No	Used as received	1g	DCM	6r	Soxhlet

lab	ISO17025 accredited	sample further grinded or cut	sample intake (g)	extraction solvent	extraction time (min)	extraction temp (°C)
2362	Yes	Used as received	1.0	DCM	6hr	Soxhlet
2363	Yes	Further cut	0.5g	THF,HEX	60mins	60°C
2365	Yes	Further cut	0.1g	n-Hexane;Tetrahydrofuran	60min	60°C
2366	Yes	Further cut	0.1g	THF:n-Hexane	60	60
2369	Yes	---				
2370	Yes	Further cut	0.3g	CPSC-CH-C1001-09.4: THF : HEX=10 : 20mL / IEC 62321-8: THF : ACN=10 : 20mL	60 min	Room temperature
2373	Yes	Further cut	0.1g	THF, Hexane	60min	60°C
2375	Yes	Further cut	0,1 gram	THF	30 min	Room temperature
2376	Yes	Used as received	1.0	Acetone	16 hrs	40
2378	No	Further cut	0.1g	dichloromethane	6h	65°C
2379	Yes	Further grinded	0.3 g	THF : ACN	60 min	60 C
2380	Yes	Used as received	0.1 g	Tetrahydrofuran (THF) & n-Hexane	60 Minute	60 °C
2381	Yes	Further cut	0.1 gram for per trial.	Tetrahydrofuran & n-hexene.	60 minutes.	60-degree Celsius.
2384	Yes	Further grinded	0.3g	tetrahydrofuran	60 min	60°C
2386	Yes	Used as received	0.5 g	THF	60 min	60°C
2387	No	Further grinded	0.3g	tetrahydrofuran	60min	60
2392	Yes	Further grinded	1.5 g	THF : ACN 1 : 2	60 min	60°Celsius
2406	Yes	Used as received	0.05 gram	Tetrahydrofuran (THF)	30 minutes	Room temp.
2413	Yes	Used as received	#23610- 0.1495g #23611- 0.1551g	THF/Hexane	30 minutes	40 Degrees Celcius
2415	Yes	Further cut	0.15 gram	15 mL THF + 30 mL hexane	60 minutes	60°C
2420	Yes	Used as received	1 g	dichloromethane	4 h	60C
2426	Yes	Further cut	0.05 gm	n-Hexane and THF	60 mins	60 C
2429	Yes	Further cut	0.05g	THF	60min	60°C
2431	Yes	Further cut	0.05g	THF Hexane	30mins	room temp
2442	Yes	Further cut	0.1018 & 0.1027	Tetrahydro Furan (THF) & Acetonitrile (ACN)	30 mins	40° C
2449	Yes	Further cut	0.3 gram	THF and ACN	30 min	40 C
2460	Yes	Further cut	0.05 g	Hexane 5 mL):THF(10 mL)	45 min	Temp start 21°C
2474	Yes	Further cut	1 gram	DCM	360 minutes	80°C
2475	Yes	Used as received	0.1G	TOLUENE	60	60
2476	---	---				
2481	---	---				
2489	Yes	Further cut	0.3g/0.3g	THF/n-Hexane	30 minutes	30 degree
2494	Yes	Further cut	0.05 gram	THF and n-hexane	60 minutes	60°C
2495	Yes	Used as received	0.15g	5mL THF	60 minutes	60 °C
2500	Yes	Further cut	0.3 grams	THF:ACN(1:2)	120 minutes	40°C
2503	---	---				
2507	Yes	Further grinded	0.05g	5 mL THF and 10 mL Hexane	Technique Ultrasonic THF/30 min (extraction) and mechanical shaking 15 min	35°C
2510	Yes	Used as received	0.15	THF/acetonitrile	1200	40
2511	---	---				
2529	No	Further cut	0.0500	tetrahydrofuran (5 mL) and acetonitrile (10 mL)	30 min for sonication, allowed 1 hr for precipitation	unknown
2532	Yes	Further cut	0.12 grams	THF: Hexane	30 minutes	Room Temperature
2538	Yes	Further cut	0,3 g	THF/Hexan	120 min	60 °C
2567	Yes	Further cut	0.05 gm	THF: Hexane	30 min	
2569	Yes	Further cut	0.5 gm	THF & n-Hexane	60 Minutes	50 °C
2572	Yes	---				
2573	Yes	Used as received	0.5g	THF and n-Hexane	60 mins	60 °C
2590	Yes	Further cut	0.3g	thf-hex	60 min	60°C
2591	Yes	Further cut	0,1 g	THF	30 minutes	Room temperature
2605	Yes	Further cut	0.05	THF/HEXANE	30	room temperature
2629	Yes	Used as received	0.1g	Tetrahydrofuran	Until the completely dissolved with max 60 min	40

lab	ISO17025 accredited	sample further grinded or cut	sample intake (g)	extraction solvent	extraction time (min)	extraction temp (°C)
2643	Yes	Used as received	0.3 g	THF + HEXANE	60	70
2649	Yes	Further cut	0.3 gram	Tetrahydrofuran, n-Hexane	30 minutes	Room temperature
2678	Yes	Used as received	0.05 g	THF	30 min	25°C
2689	Yes	Further cut	0.3g	tetrahydrofuran+acetonitrile	60 mins	40°C
2703	Yes	Used as received	#23610=0.1033 g #23611=0.1012 g	Tetrahydrofuran	60	60
2720	---	---	0.05g	Tetrahydrofuran+n-hexane	60min	room temperature
2722	No	Further cut	0.15	THF	30 mins	~50C
2736	Yes	Further cut	0.5g	15 mL THF + 30 mL ACN	60 minutes	room temp
2797	Yes	Further grinded	0.05 g	THF	30	Room temperature
2821	Yes	Further cut	0,5 g	Toluene	60 minutes	60 °C
2826	Yes	Used as received	#23610: 0.0574g #23611: 0.0482g	Tetrahydrofuran (THF)	1 hour	Room temperature
2829	Yes	Further cut	0.05	THF/n-hexane	30	35
2835	Yes	Further cut	0.5	METHYLENE CHLORIDE	5	100
2858	Yes	Used as received	0.3 gm	THF+n-Hexane	60	60
2867	Yes	Further cut	0.3g	Tetrahydrofuran+acetonitrile	60 minutes	60°C
2870	Yes	Further cut	0.3 gm	THF/Hexane	60 minutes	60°C
2885	No	Further cut	0.3 g	THF/Acetonitrile	60 min	40 °C
2931	---	---				
2943	Yes	Used as received	0.1	THF+Exane	30	Room temperature
2948	---	---				
2959	Yes	Further cut	0.3	THF&N-Hexane	60	60
2960	Yes	Used as received	0.05	THF+Hexane	30min	60
2976	Yes	Further cut	0.05g & 0.10g	THF + n-Hexane	30 min	Room temperature
2977	No	Used as received	0,3g	THF/Hexane	60MIN	60°C
2998	No	Further cut	1	N-hexane	420	70
2999	Yes	Used as received	0.1g	THF:ACN(1:2)	60min	40
3000	Yes	Used as received	0.1	THF:ACN(1:2)	60	40
3005	No	Used as received	0.3g	THF	60	40
3006	Yes	Further cut	About 0.2mg or 0.04mg			
3015	Yes	Used as received	0.05g	5ml tetrahydrofuran+10ml n-hexane	30min	Room temperature
3020	No	Used as received	1	tetrahydrofurane	60	25
3100	Yes	Further cut	0.060g	DCM	60min	60°C
3110	---	---				
3113	---	---				
3116	Yes	Used as received	For CPSC method, 0.1g For ST 2016, 1g	For CPSC method, tetrahydrofuran/acetonitrile For ST 2016, acetone/hexane	For CPSC method, 30 mins For ST 2016, 720 mins	For CPSC method, 40 deg.C For ST 2016, 40 deg.C
3118	Yes	Further cut	0.10 gram	Tetrahydrofuran (THF)	120 minutes	room temperature
3153	Yes	Further cut	0.1 gram	THF	150 minutes	Room temperature
3163	No	Further cut	0.05	Ethanol	120	90
3166	Yes	Further cut	0.5	methylene chloride	60	20
3172	Yes	---				
3176	Yes	Used as received	1	Diethylether/n-hexane	360	Boiling point
3182	Yes	Further grinded	0.05 g	Tetrahydrofuran:n-Hexane (1:2)	120 minutes	Room temperature
3185	Yes	Further cut	0.5g	Tetrahydrofuran	150mins	Room temperature
3190	Yes	Used as received	0.05g	Extracted with tetrahydrofuran , and precipitated with n-hexane	30min + 2hour	room temperature
3197	Yes	Further cut	0,5 g (ISO 8124- 6 for 23610 purple & GB/T 22048 for 23611 green)	Dichloromethane (ISO 8124-6 for 23610 purple & GB/T 22048 for 23611 green)	60 min. (ISO 8124-6 for 23610 purple) 90 min. (GB/T 22048 for 23611 green)	60C (ISO 8124-6 for 23610 purple) 80C (GB/T 22048 for 23611 green)
3199	Yes	Used as received	0.3	THF/CAN	120	40
3205	Yes	Used as received	500 mg	THF/n-Hexane	60	
3209	Yes	Used as received	0.05g	THF and n-hexane	150min	room temp.
3210	---	Used as received	1	Toluène	60	60
3214	Yes	Further cut	0.5 gram	THF	60 min	70 degree
3218	Yes	Used as received	0.05g	TFH	30min.	/
3225	Yes	Further cut	0.2g	THF, n-hexane	30 minutes	Room temperature
3233	Yes	Used as received	0.3g	THF / ACN	2H	40°C
3237	Yes	Used as received	0,1	Hexane	30	40

lab	ISO17025 accredited	sample further grinded or cut	sample intake (g)	extraction solvent	extraction time (min)	extraction temp (°C)
3246	Yes	Used as received	0.5g	THF	until completely dissolve	60°C
3247	Yes	Further cut	2g	THF/n-Hexane	30 min	room temperature
3248	Yes	Used as received	0.05	15	30 minutes	Room Temperature
3250	Yes	Used as received	0.3g	solvent mix of Acetonitrile (ACN) and Tetrahydrofuran (THF)	2h	40°C
8005	Yes	Used as received	2g	For ISO 8124-6:2018, GB/T 22048-2022 and IS 9873 (Part 6):2017, 1g For EN 14372:2004, dichloromethane For EN 14372:2004, diethyl ether	For ISO 8124-6:2018, GB/T 22048-2022 and IS 9873 (Part 6):2017, 360 mins For EN 14372:2004, 360 mins	For ISO 8124-6:2018, GB/T 22048-2022 and IS 9873 (Part 6):2017, reflux temperature For EN 14372:2004, reflux temperature
8008	---	---				
8030	Yes	Further grinded	0.1 g	THF:HEX	60 min	60 C

**APPENDIX 4****Number of participants per country**

5 labs in BANGLADESH  
1 lab in BRAZIL  
3 labs in CAMBODIA  
2 labs in CROATIA  
1 lab in CYPRUS  
1 lab in DENMARK  
1 lab in EGYPT  
1 lab in FINLAND  
5 labs in FRANCE  
6 labs in GERMANY  
2 labs in GUATEMALA  
23 labs in HONG KONG  
10 labs in INDIA  
4 labs in INDONESIA  
1 lab in IRELAND  
9 labs in ITALY  
4 labs in JAPAN  
7 labs in KOREA, Republic of  
3 labs in MALAYSIA  
2 labs in MEXICO  
1 lab in MOROCCO  
32 labs in P.R. of CHINA  
4 labs in PAKISTAN  
1 lab in PERU  
1 lab in POLAND  
3 labs in SINGAPORE  
2 labs in SPAIN  
3 labs in TAIWAN  
5 labs in THAILAND  
3 labs in THE NETHERLANDS  
2 labs in TUNISIA  
4 labs in TURKEY  
9 labs in U.S.A.  
2 labs in UNITED KINGDOM  
8 labs in VIETNAM

## APPENDIX 5

### Abbreviations

C	= final test result after checking of first reported suspect test 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's outlier test
R(0.05)	= straggler in Rosner's outlier test
E	= calculation difference between reported test result and result calculated by iis
W	= test result withdrawn on request of participant
ex	= test result excluded from statistical evaluation
n.a.	= not applicable
n.e.	= not evaluated
n.d.	= not detected
f+?	= possibly a false positive test result?
f-?	= possibly a false negative test result?

### Literature

- 1 iis Interlaboratory Studies, Protocol for the Organisation, Statistics & Evaluation, June 2018
- 2 ISO5725:86
- 3 ISO5725 parts 1-6:94
- 4 ISO13528:05
- 5 M. Thompson and R. Wood, J. AOAC Int, 76, 926, (1993)
- 6 W.J. Youden and E.H. Steiner, Statistical Manual of the AOAC, (1975)
- 7 P.L. Davies, Fr. Z. Anal. Chem, 331, 513, (1988)
- 8 J.N. Miller, Analyst, 118, 455, (1993)
- 9 Analytical Methods Committee, Technical Brief, No 4, January 2001
- 10 P.J. Lowthian and M. Thompson, The Royal Society of Chemistry, Analyst, 127, 1359-1364, (2002)
- 11 W. Horwitz and R. Albert, J. AOAC Int, 79.3, 589-621, (1996)
- 12 Bernard Rosner, Percentage Points for a Generalized ESD Many-Outlier Procedure, Technometrics, 25(2), 165-172, (1983)
- 13 R.G. Visser, Reliability of proficiency test results for metals and phthalates in plastics, Accred Qual Assur, 14, 29-34 (2009)
- 14 Annex XVII to REACH Regulation 1907/2006
- 15 iis memo 1701: Precision data of Phthalates in plastic