

Results of Proficiency Test
Phthalates in Polymers
June 2020

Organized by: Institute for Interlaboratory Studies
Spijkenisse, the Netherlands

Author: A.Lewinska, MSc.
Correctors: ing. A.S. Noordman-de Neef & ing. M. Meijer
Report: iis20P03

October 2020

-- Empty page --

CONTENTS

1	INTRODUCTION	4
2	SET UP	4
2.1	ACCREDITATION	4
2.2	PROTOCOL.....	4
2.3	CONFIDENTIALITY STATEMENT	5
2.4	SAMPLES	5
2.5	ANALYZES	6
3	RESULTS	7
3.1	STATISTICS	7
3.2	GRAPHICS	8
3.3	Z-SCORES	8
4	EVALUATION	9
4.1	EVALUATION PER SAMPLE AND PER COMPONENT	9
4.2	PERFORMANCE EVALUATION FOR THE GROUP OF LABORATORIES.....	11
4.3	COMPARISON OF THE PROFICIENCY TEST OF JUNE 2020 WITH PREVIOUS PTS	11
4.4	EVALUATION OF THE ANALYTICAL DETAILS	12
5	DISCUSSION	13
6	CONCLUSION.....	13

Appendices:

1.	Data, statistical and graphic results	14
2.	Summary of Other Phthalates	30
3.	Analytical details	42
4.	Number of participants per country	46
5.	Abbreviations and literature.....	47

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, 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. Therefore, 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 (lit. 19), DIDP (lit. 20) and DNOP as individual or combined (lit. 21).

Since 2001 the Institute of Interlaboratory Studies (iis) organizes a proficiency scheme for Phthalates in Polymers every year. During the annual proficiency testing program of 2019/2020, it was decided to continue the proficiency test for the analyzes of Phthalates in Polymers. In this interlaboratory study 171 laboratories in 40 different countries registered for participation. See appendix 4 for the number of participants per country. In this report the results of this proficiency test are presented and discussed. This report is also electronically available through the iis website www.iisnl.com.

2 SET UP

The Institute for Interlaboratory Studies (iis) in Spijkenisse, the Netherlands, was the 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 to each participant two different polyvinylchloride (PVC) samples which were made positive with some Phthalates. One sample contained 3 grams of pink blocks labelled #20605 and the other sample contained 3 grams of blue blocks labelled #20606. 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, 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 pink PVC blocks was selected which was made positive with BBP, DBP, DMP and DCHP by a third-party laboratory. After homogenization 220 small bags were filled with approximately 3 grams of the polymer material and labelled #20605. The homogeneity of the subsamples was checked by determination of all added Phthalates using an in-house method on 8 stratified randomly selected subsamples.

	BBP in %M/M	DBP in %M/M	DMP in %M/M	DCHP in %M/M
sample #20605-1	0.3319	0.1263	0.0823	0.2190
sample #20605-2	0.3303	0.1202	0.0773	0.2168
sample #20605-3	0.3345	0.1228	0.0776	0.2055
sample #20605-4	0.3447	0.1235	0.0788	0.2132
sample #20605-5	0.3433	0.1226	0.0766	0.2131
sample #20605-6	0.3335	0.1203	0.0801	0.2081
sample #20605-7	0.3384	0.1233	0.0789	0.2072
sample #20605-8	0.3295	0.1218	0.0784	0.2160

Table 1: homogeneity test results of subsamples #20605

From the above test results the repeatabilities were calculated and compared with 0.3 times the corresponding reproducibility of the reference method in agreement with the procedure of ISO13528, Annex B2 in the next table.

	BBP in %M/M	DBP in %M/M	DMP in %M/M	DCHP in %M/M
r (observed)	0.0162	0.0055	0.0050	0.0138
reference method	iis memo 1701*)	iis memo 1701*)	iis memo 1701*)	iis memo 1701*)
0.3 * R (reference method)	0.0451	0.0165	0.0106	0.0285

Table 2: evaluation of the repeatabilities of subsamples #20605

*) see lit. 20

The calculated repeatabilities were in agreement with 0.3 times the corresponding reproducibility of the reference method. Therefore, homogeneity of the subsamples was assumed.

For the second sample a batch of blue PVC blocks was selected which was made positive with DEHP, DMP, DIDP and DIBP by a third-party laboratory. After homogenization 220 small bags were filled with approximately 3 grams of the polymer material and labelled #20606. The homogeneity of the subsamples was checked by determination of all added Phthalates using an in-house method on 8 stratified randomly selected subsamples.

	DEHP in %M/M	DMP in %M/M	DIDP in %M/M	DIBP in %M/M
sample #20606-1	0.5017	0.2773	0.1483	0.2010
sample #20606-2	05090	0.2719	0.1605	0.2041
sample #20606-3	0.4811	0.2612	0.1545	0.1903
sample #20606-4	0.5007	0.2705	0.1416	0.2022
sample #20606-5	0.4934	0.2689	0.1452	0.1932
sample #20606-6	04835	0.2640	0.1455	0.1940
sample #20606-7	0.4874	0.2611	0.1414	0.1956
sample #20606-8	0.4868	0.2524	0.1462	0.1973

Table 3: homogeneity test results of subsamples #20606

From the above test results the repeatabilities were calculated and compared with 0.3 times the corresponding reproducibility of the reference method in agreement with the procedure of ISO13528, Annex B2 in the next table.

	DEHP in %M/M	DMP in %M/M	DIDP in %M/M	DIBP in %M/M
r (observed)	0.0279	0.0219	0.0183	0.0135
reference method	iis memo 1701*)	iis memo 1701*)	iis memo 1701*)	iis memo 1701*)
0.3 * R (reference method)	0.0695	0.0375	0.0209	0.0278

Table 4: evaluation of repeatabilities of subsamples #20606

*) see lit. 20

The calculated repeatabilities were in agreement with 0.3 times the corresponding reproducibility of the reference method. Therefore, homogeneity of the subsamples was assumed.

To each of the participating laboratories one sample of approximately 3 grams labelled #20605 and one sample of approximately 3 grams labelled #20606 were sent on May 6, 2020.

2.5 ANALYZES

The participants were requested to determine on samples #20605 and #20606 sixteen individual Phthalates, see appendices 1 and 2. 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 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/. 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.

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/. The reported test results are tabulated per sample and 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 re-analysis). Additional or corrected test results are used for the data analysis and the original test results are placed under 'Remarks' in the test result tables in appendices 1 or 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.

According to ISO5725 the original test results per determination were submitted to Dixon's, Grubbs' and/or Rosner's outlier tests. Outliers are marked by D(0.01) for the Dixon's test, by G(0.01) or DG(0.01) for the Grubbs' test and by R(0.01) for the Rosner'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 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. The Kernel Density Graph is a method for producing a smooth density approximation to a set of data that avoids some problems associated with histograms. Also, a normal Gauss curve was projected over the Kernel Density Graph for reference.

3.3 Z-SCORES

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

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-purpose.

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 of 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 interlaboratory study some problems were encountered with the dispatch of the samples due to the COVID-19 pandemic. Due to the pandemic seventeen participants reported after the final reporting date and nine participants did not report any test results at all. Finally, 162 laboratories reported 1255 numerical test results. Observed were 41 outlying test results, which is 3.3%. In proficiency studies outlier percentages of 3% - 7.5% are quite normal.

Not all original 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.

Regretfully, the CPSC method does not contain any precision statements. ISO14389:14 does provide a variety of precision data. There are precision data mentioned for 4 different procedures in ISO14389:14 of which procedure 4, prescribes the extraction with THF followed by precipitation with Acetonitril. The reproducibility RSD_R for 7 different Phthalates ranges from 31.5% - 124.9%.

Therefore, it is not surprising that in Annex D of test method ISO14389:14 is mentioned that “*Results indicated that both the four methods for Phthalates and the laboratories’ performance have to be drastically improved*”. It was decided in 2017 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% (lit. 20, iis memo 1701) multiplied by 2.8. This was used for the evaluation of the test results in this PT.

Sample #20605

- BBP**: This determination was not problematic. Six statistical outliers were observed. However, the calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.
- DBP**: This determination was not problematic. Three statistical outliers were observed. However, the calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.
- DCHP**: This determination was not problematic. Two statistical outliers were observed. However, the calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.
- DMP**: This determination was problematic. Ten statistical outliers were observed. However, the calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.

For all other Phthalates the group of participants agreed on a concentration below <0.01%M/M. Therefore, these Phthalates were not evaluated. See appendix 2 for the reported test results.

Sample #20606

- DEHP**: This determination was not problematic. Three statistical outliers were observed. However, 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 problematic. Four statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is not in agreement with the target reproducibility as derived from iis memo 1701.
- DMP**: This determination was not problematic. Three statistical outliers were observed. However, 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 problematic for some laboratories. Nine statistical outliers were observed. However, the calculated reproducibility after rejection of the statistical outliers is in agreement with the target reproducibility as derived from iis memo 1701.

For all other Phthalates the group of participants agreed on a concentration below <0.01%M/M. Therefore, these Phthalates were not evaluated. See appendix 2 for the reported test results.

4.2 PERFORMANCE EVALUATION FOR THE GROUP OF LABORATORIES

A comparison has been made between the reproducibility as declared by the reference test method and the reproducibility as found for the group of participating laboratories. The number of significant test results, the average, the calculated reproducibility ($2.8 \times$ standard deviation) and the target reproducibility as derived from iis memo 1701 are presented in the next tables.

Component	unit	n	average	2.8 * sd	R(target)
BBP	%M/M	155	0.295	0.101	0.132
DBP	%M/M	158	0.130	0.048	0.058
DCHP	%M/M	138	0.203	0.073	0.091
DMP	%M/M	98	0.070	0.024	0.031

Table 5: reproducibilities of tests on sample #20605

Component	unit	n	average	2.8 * sd	R(target)
DEHP	%M/M	156	0.456	0.155	0.204
DIDP	%M/M	135	0.146	0.081	0.065
DMP	%M/M	105	0.211	0.090	0.095
DIBP	%M/M	147	0.184	0.054	0.082

Table 6: reproducibilities of tests on sample #20606

Without further statistical calculations, it could be concluded that for the majority of Phthalates present in the samples, there is a good compliance of the group of participating laboratories with the target. The problematic tests have been discussed in paragraph 4.1.

4.3 COMPARISON OF THE PROFICIENCY TEST OF JUNE 2020 WITH PREVIOUS PTS

	June 2020	June 2019	May 2018	May 2017	May 2016
Number of reporting laboratories	162	202	188	186	170
Number of test results	1255	1475	1289	1339	1258
Number of statistical outliers	41	47	60	18	66
Percentage of statistical outliers	3.3%	3.2%	4.7%	1.3%	5.2%

Table 7: 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, expressed as relative standard deviation (RSD) of the PTs, see next table.

Component	June 2020	June 2019	May 2018	May 2017	2016-2006	Target
BBP	12%	--	11%	--	11 - 25%	16%
DEHP	12%	15%	13%	17 - 29%	12 - 20%	16%
DBP	13%	14%	13%	16 - 17%	10 - 28%	16%
DIDP	20%	16%	--	--	15 - 27%	16%
DINP ¹⁾	--	23%	22%	31%	12 - 33%	16%
DNOP	--	--	19%	--	15 - 23%	16%
DCHP	13%	--	11%	--	16%	16%
DEP	--	14 - 15%	8%	--	13%	16%
DMP	12 - 15%	14%	--	--	12%	16%
DNHP	--	--	--	17%	10 - 11%	16%
DIBP	11%	11%	--	--	9 - 16%	16%
DNPP	--	--	14%	16%	15%	16%
DPRP	--	12%	--	--	--	16%

Table 8: development of uncertainties of Phthalates 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 and within the target uncertainty for most Phthalates.

4.4 EVALUATION OF THE ANALYTICAL DETAILS

In this PT it was asked to report, besides some analytical details, whether the laboratory was accredited for the determination of Phthalates in Polymers. The majority (91%) of the participants reported to be ISO/IEC17025 accredited for the determination of Phthalates in Polymers. As this is the majority of the group no separate statistical analysis has been performed.

About 58% of the laboratories reported to have used CPSC-CH-C1001-09.3/09.4 as test method and about 11% of the laboratories reported to have used ISO14389 as test method. Both test methods are based on THF extraction. About 12% of the laboratories reported to have used an in-house method, other methods reported to be used were for example EN14372, IEC62321-8, ISO/TS16181 and ISO8124-6.

In this proficiency test the majority (81%) of the laboratories reported to have used THF as extraction solvent. Details of the method information as reported by the participating laboratories are given in appendix 3.

5 DISCUSSION

From 2008 - 2010 significant differences between the EN14372 results and the results from THF dissolution were observed. In the PTs of 2011 – 2014 this was no longer the case. In the proficiency test from 2015 onwards, the majority of laboratories used THF as extraction solvent. Also, in this proficiency test the majority of the laboratories used THF as solvent to release the Phthalates from the polymer material.

6 CONCLUSION

The majority of the group identified all positive Phthalates correctly: #20605 contained BBP, DBP, DCHP and DMP and sample #20606 contained DEHP, DIDP, DMP and DIBP.

Plastic toys may contain either individual or in mixtures less than 0.1 %M/M of DEHP, DBP, BBP and DIBP or less than 0.1%M/M of DINP, DIDP and DNOP. When the results of this interlaboratory study were compared to the above regulations, it is noticed that almost all of the reporting laboratories would reject both samples #20605 and #20606 for containing too much Phthalates except DMP in sample #20605.

Although it can be concluded that most of the participants have no problem with the determination on 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.

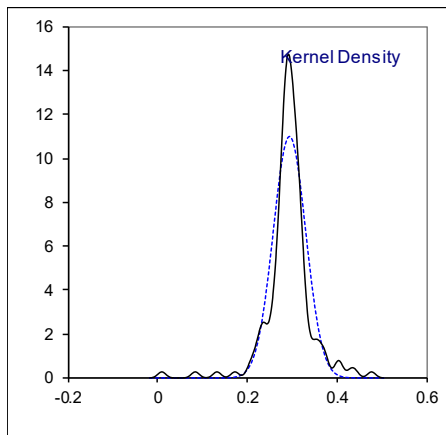
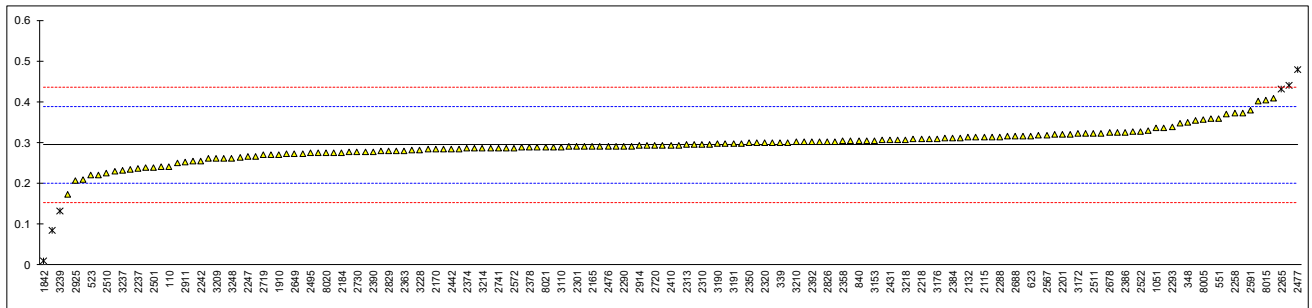
APPENDIX 1

Determination of BBP – Benzyl butyl phthalate on sample #20605; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.2403		-1.16	2381	CPSC-CH-C1001-09.4	0.3062		0.24
210	ISO14389	0.3585		1.35	2382	CPSC-CH-C1001-09.4	0.2840		-0.23
230		----		----	2384	IEC62321-8	0.31070		0.34
339	In house	0.30		0.11	2386	CPSC-CH-C1001-09.4	0.3255		0.65
348	CPSC-CH-C1001-09.4	0.3485		1.14	2387	IEC62321-8:17	0.23759		-1.21
362		----		----	2390	ISO14389	0.2779		-0.36
523	CPSC-CH-C1001-09.4	0.21973		-1.59	2392	IEC62321-8	0.3020		0.15
551	CPSC-CH-C1001-09.4	0.358558		1.35	2410	CPSC-CH-C1001-09.4	0.2932		-0.03
623	CPSC-CH-C1001-09.4	0.3155		0.44	2413		----		----
826	IEC62321-8	0.309		0.30	2429	CPSC-CH-C1001-09.4	0.294		-0.02
840	CPSC-CH-C1001-09.4	0.3037		0.19	2431	CPSC-CH-C1001-09.4	0.3057		0.23
841	CPSC-CH-C1001-09.4	0.2697		-0.53	2442	CPSC-CH-C1001-09.4	0.284		-0.23
1051	GB22048	0.3354		0.86	2453	CPSC-CH-C1001-09.4	0.441	R5	3.10
1842	In house	0.0098	R1	-6.04	2460		----		----
1910	In house	0.27070		-0.51	2475		----		----
2102	In house	0.3231		0.60	2476	CPSC-CH-C1001-09.4	0.2907		-0.09
2104	CPSC-CH-C1001-09.4	0.2925		-0.05	2477	CPSC-CH-C1001-09.4	0.478	R1	3.88
2115	ISO14389	0.313		0.39	2489	ISO14839:14	0.2743	C	-0.43
2118	ISO14389	0.2544		-0.86	2495	CPSC-CH-C1001-09.3	0.27403		-0.44
2129	ISO17070Mod.	0.408		2.40	2500	CPSC-CH-C1001-09.4	0.3261		0.66
2132	CPSC-CH-C1001-09.4	0.3127		0.38	2501	ISO14389	0.2381		-1.20
2135	ISO14389	0.293		-0.04	2507		----		----
2137	KS M1991	0.30		0.11	2510	In house	0.22550		-1.47
2146		----		----	2511	CPSC-CH-C1001-09.4	0.322		0.58
2156	CPSC-CH-C1001-09.4	0.28755		-0.15	2522	CPSC-CH-C1001-09.4	0.327		0.68
2165	CPSC-CH-C1001-09.4	0.2903		-0.10	2529		----		----
2170	CPSC-CH-C1001-09.4	0.2840		-0.23	2532	CPSC-CH-C1001-09.4	0.273		-0.46
2184	ISO8124-6	0.2754		-0.41	2538		----		----
2201	CPSC-CH-C1001-09.4	0.3198		0.53	2560	CPSC-CH-C1001-09.4	0.3302		0.75
2202	IEC62321-8	0.2775		-0.37	2563	ISO14389	0.173		-2.58
2212	CPSC-CH-C1001-09.4	0.3171		0.47	2567	CPSC-CH-C1001-09.4	0.3177		0.49
2218	CPSC-CH-C1001-09.4	0.3089		0.30	2572	CPSC-CH-C1001-09.3	0.287		-0.17
2230	CPSC-CH-C1001-09.4	0.310	C	0.32	2582	ISO14389	0.37156		1.63
2236	In house	0.2913		-0.07	2590	CPSC-CH-C1001-09.3	0.300		0.11
2237	In house	0.2373		-1.22	2591	CPSC-CH-C1001-09.4	0.378		1.76
2241	ISO8124-6	0.3034		0.18	2605	CPSC-CH-C1001-09.4	0.2987		0.08
2242	CPSC-CH-C1001-09.4	0.2554		-0.84	2614	CPSC-CH-C1001-09.4	0.272		-0.48
2247	CPSC-CH-C1001-09.4	0.2658		-0.62	2642	CPSC-CH-C1001-09.4	0.3357		0.87
2256	CPSC-CH-C1001-09.4	0.287		-0.17	2643	CPSC-CH-C1001-09.4	0.319		0.51
2258	CPSC-CH-C1001-09.3	0.371560	C	1.63	2649	CPSC-CH-C1001-09.4	0.2724		-0.48
2264		----		----	2674	CPSC-CH-C1001-09.4	0.2852		-0.20
2265	ISO14389	0.4304	R5	2.87	2678	CPSC-CH-C1001-09.4	0.3240		0.62
2267	In house	0.23		-1.37	2688	KS M1991	0.31473	C	0.42
2272	ISO14389	0.2613		-0.71	2719	CPSC-CH-C1001-09.4	0.2696		-0.53
2288	CPSC-CH-C1001-09.3	0.31415		0.41	2720	CPSC-CH-C1001-09.4	0.2926		-0.05
2289	ISO8124-6	0.3086		0.29	2722	CPSC-CH-C1001-09.4	0.3056		0.23
2290	CPSC-CH-C1001-09.4	0.291		-0.08	2730	ISO14389	0.276	C	-0.40
2293	CPSC-CH-C1001-09.4	0.3389		0.93	2736	In house	0.266		-0.61
2295	CPSC-CH-C1001-09.4	0.32		0.53	2741	ISO14389	0.2861		-0.18
2301	CPSC-CH-C1001-09.3	0.29		-0.10	2826	CPSC-CH-C1001-09.4	0.3028		0.17
2310	CPSC-CH-C1001-09.4	0.295		0.00	2829	CPSC-CH-C1001-09.4	0.280		-0.31
2311	ISO14389	0.3213		0.56	2835	EPA3545A/8270E	0.084497	R1	-4.46
2313	ISO14389	0.294		-0.02	2857	IEC62321-8	0.3040		0.19
2314	ISO14389	0.2901		-0.10	2864	IEC62321-8	0.262459		-0.69
2316	IEC62321-8	0.31134		0.35	2870	ISO14389	0.221		-1.56
2320	CPSC-CH-C1001-09.4	0.29901		0.09	2881	In house	0.25	C	-0.95
2330	CPSC-CH-C1001-09.4	0.2882		-0.14	2900	CPSC-CH-C1001-09.3	0.2937		-0.02
2347	CPSC-CH-C1001-09.4	0.2907		-0.09	2911	CPSC-CH-C1001-09.4	0.252		-0.91
2350		0.2986		0.08	2914	In house	0.2922		-0.06
2352	EN14372	0.2833		-0.24	2925	EN62321-8	0.2058		-1.89
2353	IEC62321-8	0.3030		0.17	2927	IEC62321-8	0.286		-0.19
2355	IEC62321-8	0.2896		-0.11	3100	CPSC-CH-C1001-09.4	0.3148		0.42
2357	EN14372	0.276		-0.40	3110	CPSC-CH-C1001-09.4	0.2888		-0.13
2358	CPSC-CH-C1001-09.4	0.3032		0.18	3116	CPSC-CH-C1001-09.4	0.40079		2.25
2363	ISO14389	0.2803		-0.31	3118	CPSC-CH-C1001-09.4	0.2339		-1.29
2365	CPSC-CH-C1001-09.4	0.28828		-0.14	3122	CPSC-CH-C1001-09.4	0.21		-1.80
2366	CPSC-CH-C1001-09.4	0.2842		-0.23	3153	CPSC-CH-C1001-09.4	0.3050		0.22
2369	CPSC-CH-C1001-09.4	0.302		0.15	3154		0.2752		-0.42
2370	IEC62321-8	0.279		-0.34	3163	In house	0.37		1.59
2372	CPSC-CH-C1001-09.3	0.3018		0.15	3166	In house	0.280		-0.31
2374	In house	0.2850		-0.21	3172	CPSC-CH-C1001-09.4	0.3212		0.56
2375	EN14372	0.291		-0.08	3176	CPSC-CH-C1001-09.4	0.309		0.30
2378	CPSC-CH-C1001-09.4	0.2877		-0.15	3182	CPSC-CH-C1001-09.4	0.2804		-0.31
2379	IEC62321-8	0.3127		0.38	3185	CPSC-CH-C1001-09.4	0.3133		0.39
2380		0.29555		0.02	3190	CPSC-CH-C1001-09.4	0.2966		0.04

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3191	CPSC-CH-C1001-09.4	0.29751		0.06					
3197	CPSC-CH-C1001-09.4	0.2980		0.07					
3199	In house	0.325		0.64					
3209	CPSC-CH-C1001-09.4	0.2610		-0.72					
3210	In house	0.30148		0.14					
3214	CPSC-CH-C1001-09.4	0.2854		-0.20					
3218	CPSC-CH-C1001-09.3	0.3072		0.26					
3225	CPSC-CH-C1001-09.4	0.297		0.05					
3228	CPSC-CH-C1001-09.4	0.2810		-0.29					
3237	CPSC-CH-C1001-09.4	0.231		-1.35					
3239	IEC62321-8	0.133	C,R1	-3.43					
3248	CPSC-CH-C1001-09.4	0.262		-0.70					
3250	In house	0.24	C	-1.16					
8005	In house	0.3563		1.30					
8006		0.3548		1.27					
8007	CPSC-CH-C1001-09.4	0.3472		1.11					
8008	JTSS ST2016	0.3144		0.42					
8015	In house	0.4046		2.33					
8020	IEC62321-8	0.2749		-0.42					
8021	CPSC-CH-C1001-09.4	0.2882		-0.14					
8030	ST2016	0.2609		-0.72					
	normality	suspect							
	n	155							
	outliers	6							
	mean (n)	0.29482							
	st.dev. (n)	0.036241	RSD = 12%						
	R(calc.)	0.10147							
	st.dev.(iis memo 1701)	0.047171							
	R(iis memo 1701)	0.13208							

Lab 2230 first reported: 3105 %M/M
 Lab 2258 first reported: 0.104193
 Lab 2489 reported: 2743 %M/M
 Lab 2688 first reported: 3.14734
 Lab 2730 first reported: switch samples, reported as #20606
 Lab 2881 first reported: 0.90
 Lab 3239 first reported: 0.122
 Lab 3250 first reported: switch samples, reported as #20606

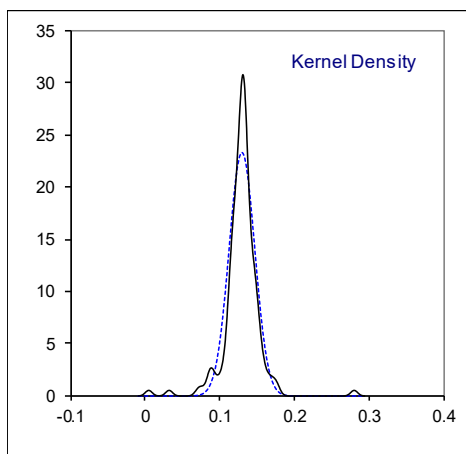
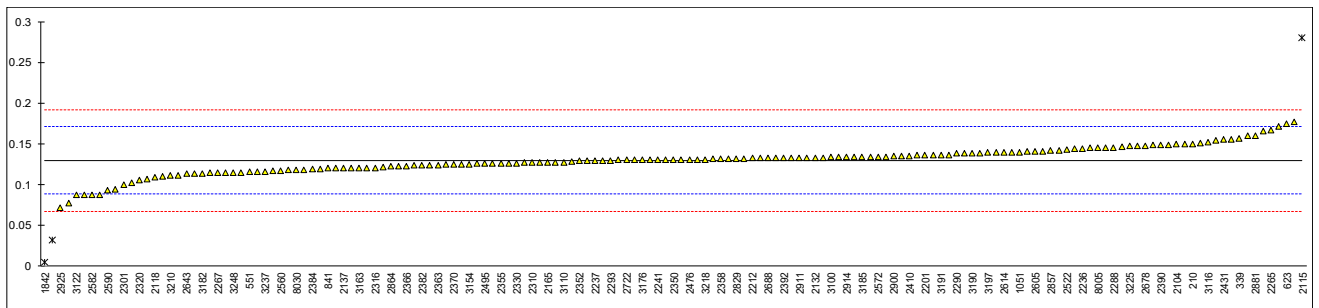


Determination of DBP – Dibutyl phthalate on sample #20605; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.1214		-0.41	2381	CPSC-CH-C1001-09.4	0.133		0.15
210	ISO14389	0.1503		0.99	2382	CPSC-CH-C1001-09.4	0.1240		-0.28
230		-----		-----	2384	IEC62321-8	0.11930		-0.51
339	In house	0.157		1.31	2386	CPSC-CH-C1001-09.4	0.1455		0.75
348	CPSC-CH-C1001-09.4	0.1514		1.04	2387	IEC62321-8:17	0.08773		-2.03
362		-----		-----	2390	ISO14389	0.1487		0.91
523	CPSC-CH-C1001-09.4	0.11761		-0.59	2392	IEC62321-8	0.1330		0.15
551	CPSC-CH-C1001-09.4	0.115887		-0.67	2410	CPSC-CH-C1001-09.4	0.1353		0.26
623	CPSC-CH-C1001-09.4	0.1745		2.15	2413		-----		-----
826	IEC62321-8	0.131		0.06	2429	CPSC-CH-C1001-09.4	0.127		-0.14
840	CPSC-CH-C1001-09.4	0.1333		0.17	2431	CPSC-CH-C1001-09.4	0.1550		1.21
841	CPSC-CH-C1001-09.4	0.1199		-0.48	2442	CPSC-CH-C1001-09.4	0.125		-0.23
1051	GB22048	0.1396		0.47	2453	CPSC-CH-C1001-09.4	0.154		1.16
1842	In house	0.0051	R1	-6.00	2460		-----		-----
1910	In house	0.10988		-0.96	2475		-----		-----
2102	In house	0.1325		0.13	2476	CPSC-CH-C1001-09.4	0.1310		0.06
2104	CPSC-CH-C1001-09.4	0.1495		0.95	2477	CPSC-CH-C1001-09.4	0.166		1.74
2115	ISO14389	0.28	C,R1	7.23	2489	ISO14839:14	0.1366	C	0.33
2118	ISO14389	0.1094		-0.98	2495	CPSC-CH-C1001-09.3	0.12568		-0.20
2129	ISO17070Mod.	0.142		0.59	2500	CPSC-CH-C1001-09.4	0.1362		0.31
2132	CPSC-CH-C1001-09.4	0.1332		0.16	2501	ISO14389	0.1118		-0.87
2135	ISO14389	0.155		1.21	2507		-----		-----
2137	KS M1991	0.12		-0.47	2510	In house	0.10625		-1.13
2146		-----		-----	2511	CPSC-CH-C1001-09.4	0.149		0.92
2156	CPSC-CH-C1001-09.4	0.14635		0.80	2522	CPSC-CH-C1001-09.4	0.143		0.63
2165	CPSC-CH-C1001-09.4	0.1273		-0.12	2529		-----		-----
2170	CPSC-CH-C1001-09.4	0.1340		0.20	2532	CPSC-CH-C1001-09.4	0.1393		0.46
2184	ISO8124-6	0.1336		0.18	2538		-----		-----
2201	CPSC-CH-C1001-09.4	0.1358		0.29	2560	CPSC-CH-C1001-09.4	0.1175		-0.59
2202	IEC62321-8	0.1327		0.14	2563	ISO14389	0.077		-2.54
2212	CPSC-CH-C1001-09.4	0.1324		0.12	2567	CPSC-CH-C1001-09.4	0.1395		0.47
2218	CPSC-CH-C1001-09.4	0.1352		0.26	2572	CPSC-CH-C1001-09.3	0.134		0.20
2230	CPSC-CH-C1001-09.4	0.132	C	0.10	2582	ISO14389	0.08732		-2.05
2236	In house	0.1446		0.71	2590	CPSC-CH-C1001-09.3	0.0930		-1.77
2237	In house	0.1293		-0.03	2591	CPSC-CH-C1001-09.4	0.160		1.45
2241	ISO8124-6	0.1304		0.03	2605	CPSC-CH-C1001-09.4	0.1404		0.51
2242	CPSC-CH-C1001-09.4	0.1149		-0.72	2614	CPSC-CH-C1001-09.4	0.1394		0.46
2247	CPSC-CH-C1001-09.4	0.1331		0.16	2642	CPSC-CH-C1001-09.4	0.1357		0.28
2256	CPSC-CH-C1001-09.4	0.145		0.73	2643	CPSC-CH-C1001-09.4	0.113		-0.81
2258	CPSC-CH-C1001-09.3	0.094364		-1.71	2649	CPSC-CH-C1001-09.4	0.1182		-0.56
2264		-----		-----	2674	CPSC-CH-C1001-09.4	0.1297		-0.01
2265	ISO14389	0.1664		1.76	2678	CPSC-CH-C1001-09.4	0.1476		0.86
2267	In house	0.115		-0.71	2688	KS M1991	0.13264	C	0.14
2272	ISO14389	0.1152		-0.70	2719	CPSC-CH-C1001-09.4	0.1276		-0.11
2288	CPSC-CH-C1001-09.3	0.14578		0.77	2720	CPSC-CH-C1001-09.4	0.1224		-0.36
2289	ISO8124-6	0.1305		0.03	2722	CPSC-CH-C1001-09.4	0.1300		0.01
2290	CPSC-CH-C1001-09.4	0.138		0.39	2730	ISO14389	0.13	C	0.01
2293	CPSC-CH-C1001-09.4	0.1298		0.00	2736	In house	0.116		-0.67
2295	CPSC-CH-C1001-09.4	0.1476		0.86	2741	ISO14389	0.1236		-0.30
2301	CPSC-CH-C1001-09.3	0.10		-1.44	2826	CPSC-CH-C1001-09.4	0.1292		-0.03
2310	CPSC-CH-C1001-09.4	0.127		-0.14	2829	CPSC-CH-C1001-09.4	0.132		0.10
2311	ISO14389	0.1390		0.44	2835	EPA3545A/8270E	0.032372	R1	-4.69
2313	ISO14389	0.115		-0.71	2857	IEC62321-8	0.1418		0.58
2314	ISO14389	0.1270		-0.14	2864	IEC62321-8	0.12211		-0.37
2316	IEC62321-8	0.12058		-0.44	2870	ISO14389	0.102		-1.34
2320	CPSC-CH-C1001-09.4	0.10541		-1.18	2881	In house	0.16	C	1.45
2330	CPSC-CH-C1001-09.4	0.1264		-0.16	2900	CPSC-CH-C1001-09.3	0.1346		0.23
2347	CPSC-CH-C1001-09.4	0.1259		-0.19	2911	CPSC-CH-C1001-09.4	0.133		0.15
2350		0.1309		0.05	2914	In house	0.1335		0.18
2352	EN14372	0.1289		-0.04	2925	EN62321-8	0.0712		-2.82
2353	IEC62321-8	0.1321		0.11	2927	IEC62321-8	0.134		0.20
2355	IEC62321-8	0.126		-0.18	3100	CPSC-CH-C1001-09.4	0.1334		0.17
2357	EN14372	0.124		-0.28	3110	CPSC-CH-C1001-09.4	0.1276		-0.11
2358	CPSC-CH-C1001-09.4	0.1316		0.09	3116	CPSC-CH-C1001-09.4	0.15223		1.08
2363	ISO14389	0.124		-0.28	3118	CPSC-CH-C1001-09.4	0.1200		-0.47
2365	CPSC-CH-C1001-09.4	0.12842		-0.07	3122	CPSC-CH-C1001-09.4	0.087		-2.06
2366	CPSC-CH-C1001-09.4	0.1225		-0.35	3153	CPSC-CH-C1001-09.4	0.1130		-0.81
2369	CPSC-CH-C1001-09.4	0.130		0.01	3154		0.1251		-0.23
2370	IEC62321-8	0.125		-0.23	3163	In house	0.12		-0.47
2372	CPSC-CH-C1001-09.3	0.1196		-0.49	3166	In house	0.171		1.98
2374	In house	0.1247		-0.25	3172	CPSC-CH-C1001-09.4	0.1484		0.89
2375	EN14372	0.141		0.54	3176	CPSC-CH-C1001-09.4	0.130		0.01
2378	CPSC-CH-C1001-09.4	0.1200		-0.47	3182	CPSC-CH-C1001-09.4	0.1132		-0.80
2379	IEC62321-8	0.1403		0.50	3185	CPSC-CH-C1001-09.4	0.1337		0.19
2380		0.11702		-0.62	3190	CPSC-CH-C1001-09.4	0.1386		0.42

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3191	CPSC-CH-C1001-09.4	0.13654		0.32					
3197	CPSC-CH-C1001-09.4	0.1391		0.45					
3199	In house	0.150		0.97					
3209	CPSC-CH-C1001-09.4	0.1200		-0.47					
3210	In house	0.11160		-0.88					
3214	CPSC-CH-C1001-09.4	0.1255		-0.21					
3218	CPSC-CH-C1001-09.3	0.1311		0.06					
3225	CPSC-CH-C1001-09.4	0.147		0.83					
3228	CPSC-CH-C1001-09.4	0.1261		-0.18					
3237	CPSC-CH-C1001-09.4	0.116		-0.67					
3239	IEC62321-8	0.087		-2.06					
3248	CPSC-CH-C1001-09.4	0.115		-0.71					
3250	In house	0.13	C	0.01					
8005	In house	0.1452		0.74					
8006		0.1440		0.68					
8007	CPSC-CH-C1001-09.4	0.1381		0.40					
8008	JTSS ST2016	0.1314		0.08					
8015	In house	0.1774		2.29					
8020	IEC62321-8	0.1310		0.06					
8021	CPSC-CH-C1001-09.4	0.1334		0.17					
8030	ST2016	0.1180		-0.57					
normality		suspect							
n		158							
outliers		3							
mean (n)		0.12982							
st.dev. (n)		0.017129		RSD = 13%					
R(calc.)		0.04796							
st.dev.(iis memo 1701)		0.020772							
R(iis memo 1701)		0.05816							

Lab 2115 first reported: 0.2122
 Lab 2230 first reported: 1325 %M/M
 Lab 2489 reported: 1366 %M/M
 Lab 2688 first reported: 1.32638
 Lab 2730 first reported: switch samples, reported as #20606
 Lab 2881 first reported: 1.30
 Lab 3250 first reported: switch samples, reported as #20606

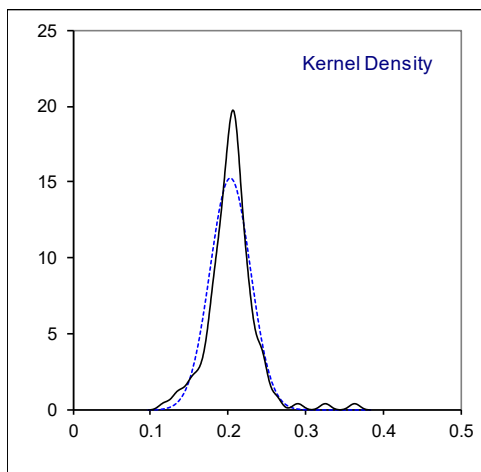
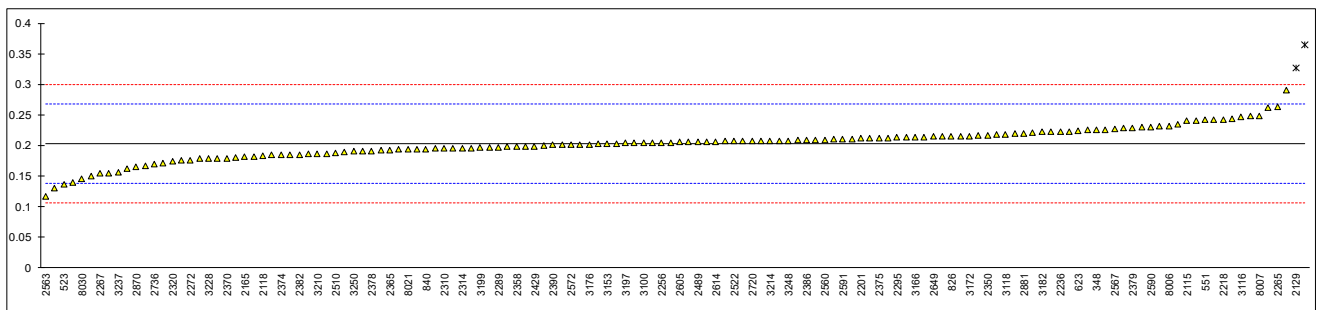


Determination of DCHP – Dicyclohexyl phthalate on sample #20605; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.1938		-0.28	2381	CPSC-CH-C1001-09.4	0.2175		0.45
210	ISO14389	0.2216		0.58	2382	CPSC-CH-C1001-09.4	0.1850		-0.55
230		----		----	2384	IEC62321-8	0.24758		1.38
339	In house	0.18		-0.70	2386	CPSC-CH-C1001-09.4	0.2084		0.17
348	CPSC-CH-C1001-09.4	0.2249		0.68	2387	IEC62321-8:17	0.24343		1.25
362		----		----	2390	ISO14389	0.2007		-0.07
523	CPSC-CH-C1001-09.4	0.13563		-2.07	2392		----		----
551	CPSC-CH-C1001-09.4	0.242175		1.21	2410	CPSC-CH-C1001-09.4	0.2068		0.12
623	CPSC-CH-C1001-09.4	0.2235		0.64	2413		----		----
826	IEC62321-8	0.215		0.37	2429	CPSC-CH-C1001-09.4	0.199		-0.12
840	CPSC-CH-C1001-09.4	0.1940		-0.27	2431	CPSC-CH-C1001-09.4	0.2028		0.00
841	CPSC-CH-C1001-09.4	0.1823		-0.63	2442	CPSC-CH-C1001-09.4	0.211		0.25
1051	GB22048	0.2423		1.22	2453	CPSC-CH-C1001-09.4	0.261		1.79
1842		----		----	2460		----		----
1910		----		----	2475		----		----
2102		----		----	2476	CPSC-CH-C1001-09.4	0.1936		-0.28
2104	CPSC-CH-C1001-09.4	0.228		0.78	2477	CPSC-CH-C1001-09.4	0.364	R1	4.97
2115	ISO14389	0.240		1.14	2489	ISO14839:14	0.2060	C	0.10
2118	ISO14389	0.1834		-0.60	2495	CPSC-CH-C1001-09.3	0.20076		-0.06
2129	ISO17070Mod.	0.326	R1	3.79	2500	CPSC-CH-C1001-09.4	0.2091		0.19
2132	CPSC-CH-C1001-09.4	0.2157		0.40	2501	ISO14389	0.1712		-0.97
2135	ISO14389	0.2259		0.71	2507		----		----
2137	KS M1991	0.24		1.14	2510	In house	0.18800		-0.46
2146		----		----	2511	CPSC-CH-C1001-09.4	0.215		0.37
2156	CPSC-CH-C1001-09.4	0.23430		0.97	2522	CPSC-CH-C1001-09.4	0.207		0.13
2165	CPSC-CH-C1001-09.4	0.1812		-0.67	2529		----		----
2170	CPSC-CH-C1001-09.4	0.2119		0.28	2532	CPSC-CH-C1001-09.4	0.2061		0.10
2184		----		----	2538		----		----
2201	CPSC-CH-C1001-09.4	0.2112		0.26	2560	CPSC-CH-C1001-09.4	0.2095		0.21
2202		----		----	2563	ISO14389	0.117		-2.64
2212	CPSC-CH-C1001-09.4	0.2123		0.29	2567	CPSC-CH-C1001-09.4	0.2266		0.73
2218	CPSC-CH-C1001-09.4	0.2427		1.23	2572	CPSC-CH-C1001-09.3	0.201		-0.06
2230	CPSC-CH-C1001-09.4	0.208	C	0.16	2582	ISO14389	0.15003	C	-1.63
2236	In house	0.2229		0.62	2590	CPSC-CH-C1001-09.3	0.230		0.84
2237	In house	0.1668		-1.11	2591	CPSC-CH-C1001-09.4	0.210		0.22
2241	ISO8124-6	0.2141		0.35	2605	CPSC-CH-C1001-09.4	0.2055		0.08
2242	CPSC-CH-C1001-09.4	0.1787		-0.74	2614	CPSC-CH-C1001-09.4	0.2062		0.10
2247	CPSC-CH-C1001-09.4	0.1947		-0.25	2642	CPSC-CH-C1001-09.4	0.1987		-0.13
2256	CPSC-CH-C1001-09.4	0.205		0.07	2643	CPSC-CH-C1001-09.4	0.223		0.62
2258	CPSC-CH-C1001-09.3	0.138598	C	-1.98	2649	CPSC-CH-C1001-09.4	0.2142		0.35
2264		----		----	2674	CPSC-CH-C1001-09.4	0.1920		-0.33
2265	ISO14389	0.2631		1.86	2678	CPSC-CH-C1001-09.4	0.2904		2.70
2267	In house	0.155		-1.47	2688		----		----
2272	ISO14389	0.1763		-0.82	2719	CPSC-CH-C1001-09.4	0.1893		-0.42
2288		----		----	2720	CPSC-CH-C1001-09.4	0.2073		0.14
2289	ISO8124-6	0.1972		-0.17	2722	CPSC-CH-C1001-09.4	0.1846		-0.56
2290	CPSC-CH-C1001-09.4	0.205		0.07	2730	ISO14389	0.213	C	0.31
2293	CPSC-CH-C1001-09.4	0.1955		-0.23	2736	In house	0.169		-1.04
2295	CPSC-CH-C1001-09.4	0.213		0.31	2741	ISO14389	0.2049		0.06
2301	CPSC-CH-C1001-09.3	0.23		0.84	2826	CPSC-CH-C1001-09.4	0.2098		0.21
2310	CPSC-CH-C1001-09.4	0.195		-0.24	2829		----		----
2311	ISO14389	0.2196		0.52	2835		----		----
2313	ISO14389	0.206		0.10	2857		----		----
2314	ISO14389	0.1956		-0.22	2864	IEC62321-8	0.18667		-0.50
2316	IEC62321-8	na		----	2870	ISO14389	0.165		-1.17
2320	CPSC-CH-C1001-09.4	0.17381		-0.89	2881	In house	0.22	C	0.53
2330	CPSC-CH-C1001-09.4	0.2249		0.68	2900		----		----
2347	CPSC-CH-C1001-09.4	0.1957		-0.22	2911	CPSC-CH-C1001-09.4	0.155		-1.47
2350		0.2171		0.44	2914	In house	0.2222		0.60
2352	EN14372	0.1903		-0.39	2925		----		----
2353	IEC62321-8	NA		----	2927		----		----
2355	IEC62321-8	0.1966		-0.19	3100	CPSC-CH-C1001-09.4	0.2049		0.06
2357	EN14372	0.184		-0.58	3110	CPSC-CH-C1001-09.4	0.2023		-0.02
2358	CPSC-CH-C1001-09.4	0.1984		-0.14	3116	CPSC-CH-C1001-09.4	0.24679		1.35
2363	ISO14389	0.176		-0.83	3118	CPSC-CH-C1001-09.4	0.2177		0.46
2365	CPSC-CH-C1001-09.4	0.19289		-0.31	3122	CPSC-CH-C1001-09.4	0.13		-2.24
2366	CPSC-CH-C1001-09.4	0.1983		-0.14	3153	CPSC-CH-C1001-09.4	0.2025		-0.01
2369	CPSC-CH-C1001-09.4	0.215		0.37	3154		0.1785		-0.75
2370	IEC62321-8	0.179		-0.73	3163		----		----
2372	CPSC-CH-C1001-09.3	0.1624		-1.25	3166	In house	0.214		0.34
2374	In house	0.1845		-0.57	3172	CPSC-CH-C1001-09.4	0.2155		0.39
2375	EN14372	0.212		0.28	3176	CPSC-CH-C1001-09.4	0.202		-0.03
2378	CPSC-CH-C1001-09.4	0.1904		-0.38	3182	CPSC-CH-C1001-09.4	0.2217		0.58
2379	IEC62321-8	0.2285		0.79	3185	CPSC-CH-C1001-09.4	0.2074		0.14
2380		0.20826		0.17	3190	CPSC-CH-C1001-09.4	0.2016		-0.04

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3191	CPSC-CH-C1001-09.4	0.20714		0.13					
3197	CPSC-CH-C1001-09.4	0.2045		0.05					
3199	In house	0.196		-0.21					
3209	CPSC-CH-C1001-09.4	0.1860		-0.52					
3210	In house	0.18648		-0.50					
3214	CPSC-CH-C1001-09.4	0.2077		0.15					
3218	CPSC-CH-C1001-09.3	0.2049		0.06					
3225	CPSC-CH-C1001-09.4	0.200		-0.09					
3228	CPSC-CH-C1001-09.4	0.1785		-0.75					
3237	CPSC-CH-C1001-09.4	0.156		-1.44					
3239		----		----					
3248	CPSC-CH-C1001-09.4	0.208		0.16					
3250	In house	0.19	C	-0.40					
8005	In house	0.2314		0.88					
8006		0.2314		0.88					
8007	CPSC-CH-C1001-09.4	0.2488		1.42					
8008		----		----					
8015		----		----					
8020		----		----					
8021	CPSC-CH-C1001-09.4	0.1936		-0.28					
8030	ST2016	0.1461		-1.75					
normality		suspect							
n		138							
outliers		2							
mean (n)		0.20284							
st.dev. (n)		0.026213	RSD = 13%						
R(calc.)		0.07340							
st.dev.(iis memo 1701)		0.032455							
R(iis memo 1701)		0.09087							

Lab 2230 first reported: 2085 %M/M
 Lab 2258 first reported: 0.051114
 Lab 2489 reported: 2060 %M/M
 Lab 2582 first reported: ND
 Lab 2730 first reported: switch samples, reported as #20606
 Lab 2881 first reported: 1.60
 Lab 3250 first reported: switch samples, reported as #20606

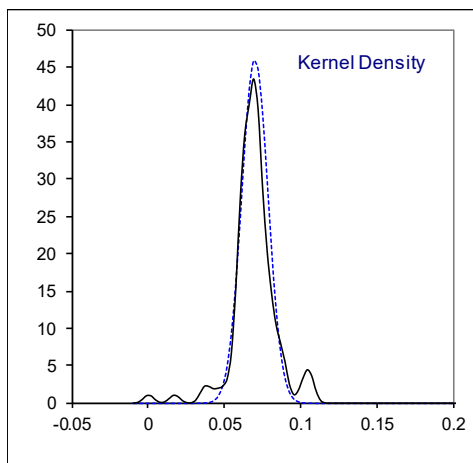
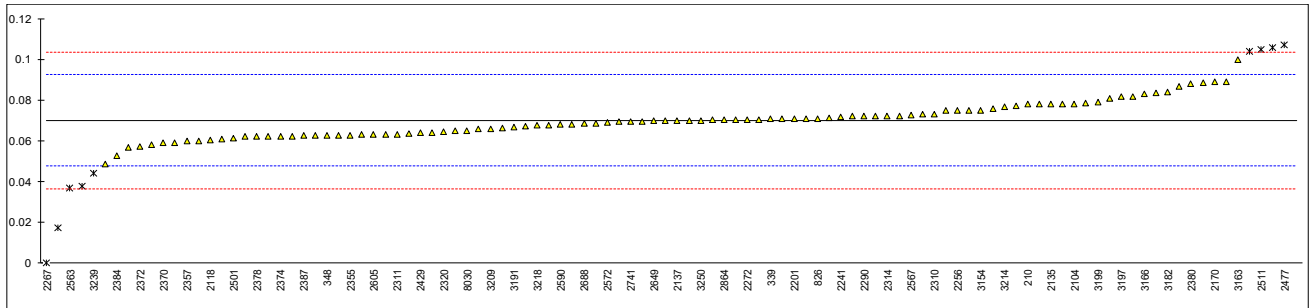


Determination of DMP – Dimethyl phthalate on sample #20605; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110		----		----	2381	CPSC-CH-C1001-09.4	0.078		0.71
210	ISO14389	0.0779		0.70	2382	CPSC-CH-C1001-09.4	0.0625		-0.67
230		----		----	2384	IEC62321-8	0.05263		-1.55
339	In house	0.0707		0.06	2386	CPSC-CH-C1001-09.4	0.0865		1.47
348	CPSC-CH-C1001-09.4	0.0626		-0.66	2387	IEC62321-8:17	0.06245		-0.68
362		----		----	2390	ISO14389	0.0635		-0.58
523		----		----	2392		----		----
551	CPSC-CH-C1001-09.4	0.06783	C	-0.20	2410	CPSC-CH-C1001-09.4	0.0687		-0.12
623	CPSC-CH-C1001-09.4	0.0835		1.20	2413		----		----
826	IEC62321-8	0.071		0.08	2429	CPSC-CH-C1001-09.4	0.064		-0.54
840	CPSC-CH-C1001-09.4	0.0747		0.41	2431		----		----
841	CPSC-CH-C1001-09.4	0.0590		-0.99	2442		----		----
1051		----		----	2453		----		----
1842		----		----	2460		----		----
1910		----		----	2475		----		----
2102		----		----	2476		----		----
2104	CPSC-CH-C1001-09.4	0.0782		0.73	2477	CPSC-CH-C1001-09.4	0.107	R5	3.30
2115	ISO14389	0.0887		1.66	2489	ISO14839:14	0.0772	C	0.64
2118	ISO14389	0.0603		-0.87	2495	CPSC-CH-C1001-09.3	0.070167		0.01
2129	ISO17070Mod.	0.089		1.69	2500		----		----
2132	CPSC-CH-C1001-09.4	NA		----	2501	ISO14389	0.0614		-0.77
2135	ISO14389	0.0781		0.72	2507		----		----
2137	KS M1991	0.07		0.00	2510	In house	0.07850		0.75
2146		----		----	2511	CPSC-CH-C1001-09.4	0.105	R5	3.12
2156	CPSC-CH-C1001-09.4	0.07810		0.72	2522		----		----
2165		----		----	2529		----		----
2170	CPSC-CH-C1001-09.4	0.0890		1.69	2532	CPSC-CH-C1001-09.4	0.0818		1.05
2184		----		----	2538		----		----
2201	CPSC-CH-C1001-09.4	0.0707		0.06	2560	CPSC-CH-C1001-09.4	0.0673		-0.25
2202		----		----	2563	ISO14389	0.037	R5	-2.95
2212	CPSC-CH-C1001-09.4	N/A		----	2567	CPSC-CH-C1001-09.4	0.0727		0.24
2218		----		----	2572	CPSC-CH-C1001-09.3	0.069		-0.09
2230	CPSC-CH-C1001-09.4	0.072	C	0.17	2582		----		----
2236	In house	0.0723		0.20	2590	CPSC-CH-C1001-09.3	0.0680		-0.18
2237	In house	0.0694		-0.06	2591	CPSC-CH-C1001-09.4	0.104	R5	3.03
2241	ISO8124-6	0.0716		0.14	2605	CPSC-CH-C1001-09.4	0.0629		-0.64
2242		----		----	2614	CPSC-CH-C1001-09.4	0.0808		0.96
2247	CPSC-CH-C1001-09.4	0.0759		0.52	2642		----		----
2256	CPSC-CH-C1001-09.4	0.075		0.44	2643		----		----
2258	CPSC-CH-C1001-09.3	0.72739	C,R1	58.65	2649	CPSC-CH-C1001-09.4	0.0699		-0.01
2264		----		----	2674	CPSC-CH-C1001-09.4	N.A		----
2265	ISO14389	< 0,05		----	2678		----		----
2267	In house	0.0003	R1	-6.22	2688	KS M1991	0.06846	C	-0.14
2272	ISO14389	0.0705		0.04	2719	CPSC-CH-C1001-09.4	0.0705		0.04
2288		----		----	2720	CPSC-CH-C1001-09.4	0.0647		-0.48
2289	ISO8124-6	0.0705		0.04	2722		----		----
2290	CPSC-CH-C1001-09.4	0.072		0.17	2730		----		----
2293	CPSC-CH-C1001-09.4	0.0751		0.45	2736		----		----
2295	CPSC-CH-C1001-09.4	0.066		-0.36	2741	ISO14389	0.0694		-0.06
2301	CPSC-CH-C1001-09.3	0.07		0.00	2826		----		----
2310	CPSC-CH-C1001-09.4	0.073		0.26	2829	CPSC-CH-C1001-09.4	0.072		0.17
2311	ISO14389	0.0632		-0.61	2835	EPA3545A/8270E	0.017358	R1	-4.70
2313	ISO14389	0.071		0.08	2857		----		----
2314	ISO14389	0.0721		0.18	2864	IEC62321-8	0.070354		0.03
2316	IEC62321-8	NA		----	2870	ISO14389	0.058		-1.08
2320	CPSC-CH-C1001-09.4	0.06453		-0.49	2881	In house	0.07	C	0.00
2330	CPSC-CH-C1001-09.4	0.0485		-1.92	2900		----		----
2347	CPSC-CH-C1001-09.4	0.0627		-0.66	2911		----		----
2350		0.0707		0.06	2914	In house	0.0379	R5	-2.87
2352	EN14372	0.0623		-0.69	2925		----		----
2353	IEC62321-8	NA		----	2927		----		----
2355	IEC62321-8	0.0628		-0.65	3100	CPSC-CH-C1001-09.4	0.0681		-0.17
2357	EN14372	0.060		-0.90	3110		----		----
2358	CPSC-CH-C1001-09.4	N/A		----	3116		----		----
2363	ISO14389	0.061		-0.81	3118	CPSC-CH-C1001-09.4	0.0661		-0.35
2365	CPSC-CH-C1001-09.4	0.06414		-0.53	3122	CPSC-CH-C1001-09.4	<0.025	f-?	<-4.02
2366	CPSC-CH-C1001-09.4	0.0629		-0.64	3153		----		----
2369	CPSC-CH-C1001-09.4	0.062		-0.72	3154		0.0751		0.45
2370	IEC62321-8	0.0590		-0.99	3163	In house	0.1		2.67
2372	CPSC-CH-C1001-09.3	0.0573		-1.14	3166	In house	0.083		1.16
2374	In house	0.0624		-0.68	3172	CPSC-CH-C1001-09.4	0.1055	R5	3.16
2375	EN14372	0.073		0.26	3176	CPSC-CH-C1001-09.4	0.063		-0.63
2378	CPSC-CH-C1001-09.4	0.0622		-0.70	3182	CPSC-CH-C1001-09.4	0.0838		1.23
2379	IEC62321-8	0.0567		-1.19	3185	CPSC-CH-C1001-09.4	0.0713		0.11
2380		0.08799		1.60	3190	CPSC-CH-C1001-09.4	0.0694		-0.06

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3191	CPSC-CH-C1001-09.4	0.06663		-0.31					
3197	CPSC-CH-C1001-09.4	0.0816		1.03					
3199	In house	0.079		0.80					
3209	CPSC-CH-C1001-09.4	0.0660		-0.36					
3210	In house	0.06242		-0.68					
3214	CPSC-CH-C1001-09.4	0.0766		0.58					
3218	CPSC-CH-C1001-09.3	0.0675		-0.23					
3225		----		----					
3228		----		----					
3237		----		----					
3239	IEC62321-8	0.044	R5	-2.32					
3248	CPSC-CH-C1001-09.4	0.060		-0.90					
3250	In house	0.07	C	0.00					
8005		----		----					
8006		----		----					
8007		----		----					
8008		----		----					
8015		----		----					
8020		----		----					
8021		----		----					
8030	ST2016	0.0649		-0.46					
	normality	OK							
	n	98							
	outliers	10							
	mean (n)	0.07005							
	st.dev. (n)	0.008649	RSD = 12%						
	R(calc.)	0.02422							
	st.dev.(iis memo 1701)	0.011208							
	R(iis memo 1701)	0.03138							

Lab 551 first reported: 0.122194
 Lab 2230 first reported: 722 %M/M
 Lab 2258 first reported: 0.01671
 Lab 2489 reported: 772 %M/M
 Lab 2688 first reported: 0.68455
 Lab 2881 first reported: 0.50
 Lab 3250 first reported: switch samples, reported as #20606

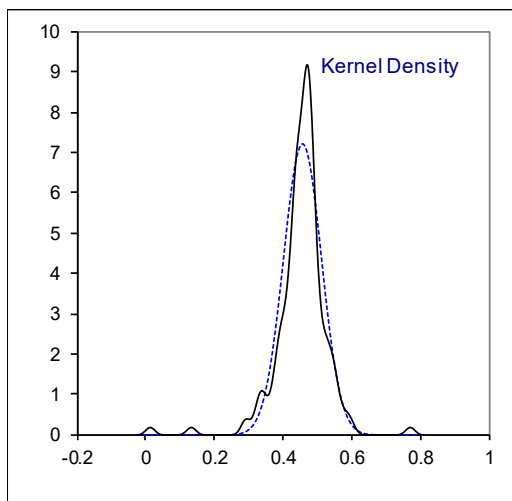
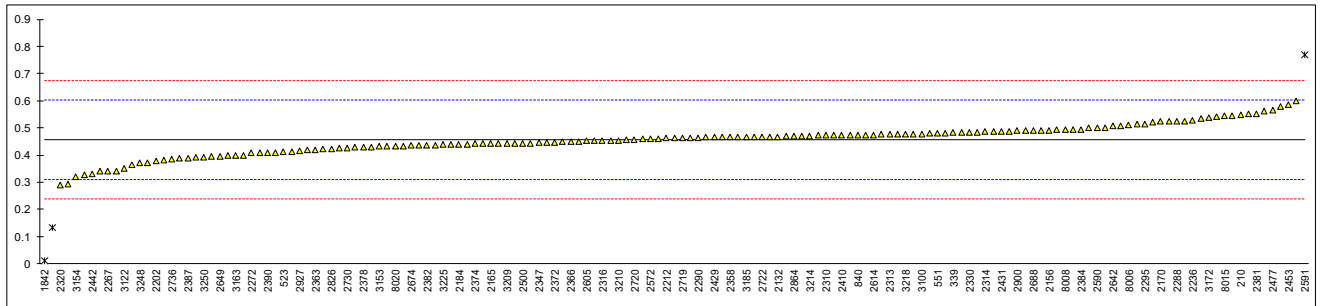


Determination of DEHP – Di-2-ethylhexyl phthalate on sample #20606; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.3991		-0.78	2381	CPSC-CH-C1001-09.4	0.5505		1.30
210	ISO14389	0.5469		1.25	2382	CPSC-CH-C1001-09.4	0.4350		-0.29
230		----		----	2384	IEC62321-8	0.49531		0.54
339	In house	0.482		0.36	2386	CPSC-CH-C1001-09.4	0.4611		0.07
348	CPSC-CH-C1001-09.4	0.4086		-0.65	2387		0.38937		-0.91
362		----		----	2390	ISO14389	0.4086		-0.65
523	CPSC-CH-C1001-09.4	0.41220		-0.60	2392	IEC62321-8	0.4245		-0.43
551	CPSC-CH-C1001-09.4	0.479138		0.32	2410	CPSC-CH-C1001-09.4	0.4726		0.23
623	CPSC-CH-C1001-09.4	0.4345		-0.29	2413		----		----
826	IEC62321-8	0.508		0.72	2429	CPSC-CH-C1001-09.4	0.466		0.14
840	CPSC-CH-C1001-09.4	0.4740		0.25	2431	CPSC-CH-C1001-09.4	0.4858		0.41
841	CPSC-CH-C1001-09.4	0.442		-0.19	2442	CPSC-CH-C1001-09.4	0.329		-1.74
1051	GB22048	0.4895		0.46	2453	ISO14389	0.587		1.80
1842	In house	0.0121	R1	-6.08	2460		----		----
1910	In house	0.50118		0.62	2475		----		----
2102	In house	0.4495		-0.09	2476	CPSC-CH-C1001-09.4	0.4788		0.31
2104		0.5502		1.29	2477	CPSC-CH-C1001-09.4	0.564		1.48
2115	ISO14389	0.560		1.43	2489	ISO14839:14	0.4853	C	0.40
2118	ISO14389	0.5399		1.15	2495	CPSC-CH-C1001-09.3	0.44103		-0.20
2129	ISO17070Mod.	0.468		0.17	2500	CPSC-CH-C1001-09.4	0.4422		-0.19
2132	CPSC-CH-C1001-09.4	0.4680		0.17	2501	ISO14389	0.3721		-1.15
2135	ISO14389	0.546		1.24	2507		----		----
2137	KS M1991	0.41		-0.63	2510	In house	0.46725		0.16
2146		----		----	2511	CPSC-CH-C1001-09.4	0.533		1.06
2156	CPSC-CH-C1001-09.4	0.49115		0.48	2522	CPSC-CH-C1001-09.4	0.458		0.03
2165	CPSC-CH-C1001-09.4	0.4413		-0.20	2529		----		----
2170	CPSC-CH-C1001-09.4	0.5243		0.94	2532	CPSC-CH-C1001-09.4	0.4754		0.27
2184	ISO8124-6	0.4384		-0.24	2538		----		----
2201	CPSC-CH-C1001-09.4	0.4901		0.47	2560	CPSC-CH-C1001-09.4	0.4778		0.30
2202	IEC62321-8	0.3793		-1.05	2563	ISO14389	0.292		-2.25
2212	CPSC-CH-C1001-09.4	0.4620		0.08	2567	CPSC-CH-C1001-09.4	0.4557		0.00
2218	CPSC-CH-C1001-09.4	0.4804		0.34	2572	CPSC-CH-C1001-09.3	0.458		0.03
2230	CPSC-CH-C1001-09.4	0.420	C	-0.49	2582	ISO14389	0.43610		-0.27
2236	In house	0.5272		0.98	2590	CPSC-CH-C1001-09.3	0.500		0.61
2237	In house	0.3651		-1.24	2591	CPSC-CH-C1001-09.4	0.770	R1	4.31
2241	ISO8124-6	0.4694		0.19	2605	CPSC-CH-C1001-09.4	0.4514		-0.06
2242	CPSC-CH-C1001-09.4	0.3870		-0.94	2614	CPSC-CH-C1001-09.4	0.4744		0.25
2247	CPSC-CH-C1001-09.4	0.4315		-0.33	2642	CPSC-CH-C1001-09.4	0.5063		0.69
2256	CPSC-CH-C1001-09.4	0.499		0.59	2643	CPSC-CH-C1001-09.4	0.466		0.14
2258	CPSC-CH-C1001-09.3	0.525712		0.96	2649	ISO14839:14	0.3942		-0.85
2264		----		----	2674	CPSC-CH-C1001-09.4	0.4342		-0.30
2265	ISO14389	0.5989		1.96	2678	CPSC-CH-C1001-09.4	0.3900		-0.90
2267		0.34		-1.59	2688		0.48960	C	0.46
2272		0.4081		-0.65	2719	CPSC-CH-C1001-09.4	0.4635		0.10
2288	CPSC-CH-C1001-09.3	0.52470		0.94	2720	CPSC-CH-C1001-09.4	0.4572		0.02
2289	ISO8124-6	0.4532		-0.04	2722	CPSC-CH-C1001-09.4	0.4678		0.16
2290	CPSC-CH-C1001-09.4	0.464		0.11	2730	ISO14389	0.426	C	-0.41
2293	CPSC-CH-C1001-09.4	0.4428		-0.18	2736	In house	0.385		-0.97
2295	CPSC-CH-C1001-09.4	0.5145		0.80	2741	ISO14389	0.4516		-0.06
2301	CPSC-CH-C1001-09.3	0.34		-1.59	2826	CPSC-CH-C1001-09.4	0.4225		-0.46
2310	CPSC-CH-C1001-09.4	0.4725		0.23	2829	CPSC-CH-C1001-09.4	0.380		-1.04
2311	ISO14389	0.4671		0.15	2835	EPA3545A/8270E	0.131749	R1	-4.44
2313	ISO14389	0.4755		0.27	2857	IEC62321-8	0.4325		-0.32
2314	ISO14389	0.4853		0.40	2864	IEC62321-8	0.469640		0.19
2316	IEC62321-8	0.45201		-0.05	2870	ISO14389	0.394		-0.85
2320	CPSC-CH-C1001-09.4	0.28884		-2.29	2881		0.34	C	-1.59
2330	CPSC-CH-C1001-09.4	0.4827		0.37	2900	CPSC-CH-C1001-09.3	0.4890		0.45
2347	IEC62321-8	0.4459		-0.14	2911	CPSC-CH-C1001-09.4	0.440		-0.22
2350		0.4953		0.54	2914	In house	0.4307		-0.34
2352	EN14372	0.4421		-0.19	2925		----		----
2353	IEC62321-8	0.4626		0.09	2927	IEC62321-8	0.416		-0.55
2355	IEC62321-8	0.4508		-0.07	3100	CPSC-CH-C1001-09.4	0.4778		0.30
2357	EN14372	0.446		-0.14	3110	CPSC-CH-C1001-09.4	0.5244		0.94
2358	CPSC-CH-C1001-09.4	0.4665		0.15	3116	CPSC-CH-C1001-09.4	0.47024		0.20
2363	ISO14389	0.42		-0.49	3118	CPSC-CH-C1001-09.4	0.4725		0.23
2365	CPSC-CH-C1001-09.4	0.47245		0.23	3122		0.35		-1.45
2366	CPSC-CH-C1001-09.4	0.4500		-0.08	3153	CPSC-CH-C1001-09.4	0.4309		-0.34
2369	CPSC-CH-C1001-09.4	0.476		0.28	3154		0.321		-1.85
2370	IEC62321-8	0.484		0.39	3163	In house	0.4		-0.77
2372		0.4470		-0.12	3166	In house	0.473		0.24
2374	In house	0.4410		-0.20	3172	CPSC-CH-C1001-09.4	0.5365		1.11
2375	EN14372	0.493		0.51	3176	CPSC-CH-C1001-09.4	0.513		0.78
2378	CPSC-CH-C1001-09.4	0.4301		-0.35	3182	CPSC-CH-C1001-09.4	0.4000		-0.77
2379	IEC62321-8	0.4220		-0.46	3185	CPSC-CH-C1001-09.4	0.4671		0.15
2380		0.58034		1.71	3190	CPSC-CH-C1001-09.4	0.4743		0.25

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3191	ISO8124-6	0.46381		0.11					
3197	CPSC-CH-C1001-09.4	0.4866		0.42					
3199	In house	0.520		0.88					
3209	CPSC-CH-C1001-09.4	0.4420		-0.19					
3210	In house	0.45395		-0.03					
3214	CPSC-CH-C1001-09.4	0.4708		0.20					
3218	CPSC-CH-C1001-09.3	0.4773		0.29					
3225	CPSC-CH-C1001-09.4	0.438		-0.24					
3228	CPSC-CH-C1001-09.4	0.4299		-0.36					
3237	CPSC-CH-C1001-09.4	0.328		-1.75					
3239		----		----					
3248	CPSC-CH-C1001-09.4	0.370		-1.18					
3250	In house	0.39	C	-0.90					
8005		0.4651		0.13					
8006		0.5117		0.77					
8007		0.4823		0.36					
8008	JTSS ST2016	0.4951		0.54					
8015	In house	0.5447		1.22					
8020	IEC62321-8	0.4318		-0.33					
8021	CPSC-CH-C1001-09.4	0.4382		-0.24					
8030	ST2016	0.4137		-0.58					
	normality	OK							
	n	156							
	outliers	3							
	mean (n)	0.45585							
	st.dev. (n)	0.055356	RSD = 12%						
	R(calc.)	0.15500							
	st.dev. (iis memo 1701)	0.072936							
	R(iis memo 1701)	0.20422							

Lab 2230 first reported: 4200 %M/M
 Lab 2489 reported: 4853 %M/M
 Lab 2688 first reported: 4.89604
 Lab 2730 first reported: switch samples, reported as #20605
 Lab 2881 first reported: 1.70
 Lab 3250 first reported: switch samples, reported as #20605



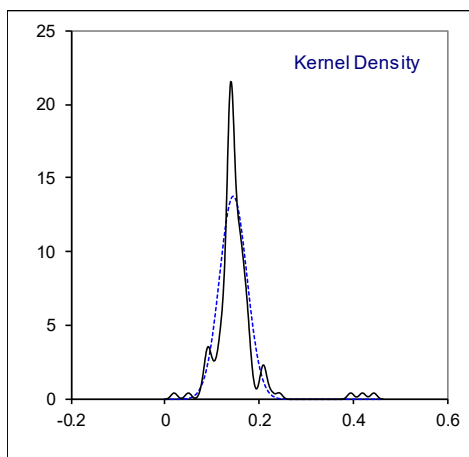
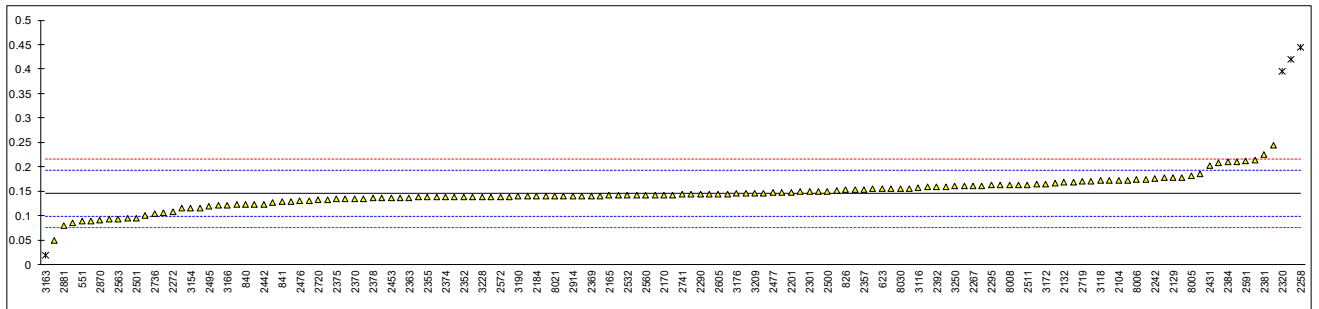
Determination of DIDP – Di-iso-decyl phthalate on sample #20606; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.1624		0.72	2381	CPSC-CH-C1001-09.4	0.2260		3.45
210	ISO14389	0.1392		-0.28	2382	CPSC-CH-C1001-09.4	0.1375		-0.35
230		----		----	2384	IEC62321-8	0.20917		2.73
339	In house	0.142		-0.15	2386	CPSC-CH-C1001-09.4	0.1549		0.40
348	CPSC-CH-C1001-09.4	0.1597		0.60	2387		----		----
362		----		----	2390	ISO14389	0.090		-2.39
523	CPSC-CH-C1001-09.4	0.08530		-2.59	2392	IEC62321-8	0.1584		0.55
551	CPSC-CH-C1001-09.4	0.089339		-2.42	2410	CPSC-CH-C1001-09.4	0.1558		0.44
623	CPSC-CH-C1001-09.4	0.1555		0.42	2413		----		----
826	IEC62321-8	0.153		0.32	2429	CPSC-CH-C1001-09.4	0.141		-0.20
840	CPSC-CH-C1001-09.4	0.1231		-0.97	2431	CPSC-CH-C1001-09.4	0.2033	C	2.48
841	CPSC-CH-C1001-09.4	0.1289		-0.72	2442	CPSC-CH-C1001-09.4	0.124		-0.93
1051	GB22048	0.1747		1.25	2453	ISO14389	0.137		-0.37
1842		----		----	2460		----		----
1910	In house	0.12057		-1.07	2475		----		----
2102		----		----	2476	CPSC-CH-C1001-09.4	0.1300		-0.67
2104		0.1729		1.17	2477	CPSC-CH-C1001-09.4	0.147		0.06
2115	ISO14389	0.173		1.18	2489	ISO14839:14	0.152	C	0.27
2118	ISO14389	0.0922		-2.29	2495	CPSC-CH-C1001-09.3	0.11853		-1.16
2129	ISO17070Mod.	0.178		1.39	2500	CPSC-CH-C1001-09.4	0.1501		0.19
2132	CPSC-CH-C1001-09.4	0.1680		0.96	2501	ISO14389	0.0944		-2.20
2135	ISO14389	0.139		-0.28	2507		----		----
2137	KS M1991	0.10		-1.96	2510	In house	0.16167		0.69
2146		----		----	2511	CPSC-CH-C1001-09.4	0.163		0.75
2156	CPSC-CH-C1001-09.4	0.20925		2.73	2522		----		----
2165	CPSC-CH-C1001-09.4	0.1411		-0.19	2529		----		----
2170	CPSC-CH-C1001-09.4	0.1427		-0.12	2532	CPSC-CH-C1001-09.4	0.1416		-0.17
2184	ISO8124-6	0.1399		-0.25	2538		----		----
2201	CPSC-CH-C1001-09.4	0.1484		0.12	2560	CPSC-CH-C1001-09.4	0.1423		-0.14
2202	IEC62321-8	0.1626		0.73	2563	ISO14389	0.093		-2.26
2212	CPSC-CH-C1001-09.4	0.1605		0.64	2567	CPSC-CH-C1001-09.4	0.1687		0.99
2218	CPSC-CH-C1001-09.4	0.1669		0.91	2572	CPSC-CH-C1001-09.3	0.139		-0.28
2230	CPSC-CH-C1001-09.4	0.138	C	-0.33	2582	ISO14389	0.13143		-0.61
2236	In house	0.1351		-0.45	2590	CPSC-CH-C1001-09.3	0.420	R1	11.78
2237	In house	0.1065		-1.68	2591	CPSC-CH-C1001-09.4	0.211		2.81
2241	ISO8124-6	0.1584		0.55	2605	CPSC-CH-C1001-09.4	0.1443		-0.06
2242	CPSC-CH-C1001-09.4	0.1756	C	1.29	2614	CPSC-CH-C1001-09.4	0.1406		-0.21
2247	CPSC-CH-C1001-09.4	0.1638		0.78	2642		----		----
2256	CPSC-CH-C1001-09.4	0.214		2.94	2643		----		----
2258	CPSC-CH-C1001-09.3	0.444153	C,R1	12.81	2649	ISO14839:14	0.1232		-0.96
2264		----		----	2674	CPSC-CH-C1001-09.4	N.A		----
2265	ISO14389	0.1779		1.39	2678		----		----
2267		0.161	C	0.66	2688		----		----
2272		0.1077		-1.63	2719	CPSC-CH-C1001-09.4	0.1706		1.07
2288		----		----	2720	CPSC-CH-C1001-09.4	0.1328		-0.55
2289	ISO8124-6	0.1452		-0.02	2722		----		----
2290	CPSC-CH-C1001-09.4	0.144		-0.07	2730		----		----
2293	CPSC-CH-C1001-09.4	0.1860		1.73	2736	In house	0.105		-1.74
2295	CPSC-CH-C1001-09.4	0.162		0.70	2741	ISO14389	0.1430		-0.11
2301	CPSC-CH-C1001-09.3	0.15		0.19	2826	CPSC-CH-C1001-09.4	0.2089		2.72
2310	CPSC-CH-C1001-09.4	0.1401		-0.24	2829	CPSC-CH-C1001-09.4	0.172		1.13
2311	ISO14389	0.150		0.19	2835	EPA3545A/8270E	0.050254		-4.09
2313	ISO14389	0.1260		-0.84	2857	IEC62321-8	0.1370	C	-0.37
2314	ISO14389	0.1409		-0.20	2864	IEC62321-8	N.D.		----
2316	IEC62321-8	0.13977		-0.25	2870	ISO14389	0.091	C	-2.34
2320	CPSC-CH-C1001-09.4	0.3952	C,R1	10.71	2881		0.08	C	-2.82
2330	CPSC-CH-C1001-09.4	0.1556		0.43	2900		----		----
2347	IEC62321-8	0.1365		-0.39	2911		----		----
2350		0.1412		-0.19	2914	In house	0.1406		-0.21
2352	EN14372	0.1385		-0.31	2925		----		----
2353	IEC62321-8	0.1432		-0.10	2927		----		----
2355	IEC62321-8	0.1378		-0.34	3100	CPSC-CH-C1001-09.4	0.1474		0.08
2357	EN14372	0.154		0.36	3110		----		----
2358	CPSC-CH-C1001-09.4	N/A		----	3116	CPSC-CH-C1001-09.4	0.15666		0.47
2363	ISO14389	0.1373		-0.36	3118	CPSC-CH-C1001-09.4	0.1714		1.11
2365	CPSC-CH-C1001-09.4	0.13335		-0.53	3122		0.094		-2.22
2366	CPSC-CH-C1001-09.4	0.1425		-0.13	3153		----		----
2369	CPSC-CH-C1001-09.4	0.141		-0.20	3154		0.1158		-1.28
2370	IEC62321-8	0.135		-0.46	3163	In house	0.02	R1	-5.39
2372		0.1496		0.17	3166	In house	0.122		-1.01
2374	In house	0.1380		-0.33	3172	CPSC-CH-C1001-09.4	0.1646		0.82
2375	EN14372	0.134		-0.50	3176	CPSC-CH-C1001-09.4	0.145		-0.03
2378	CPSC-CH-C1001-09.4	0.1357		-0.43	3182	CPSC-CH-C1001-09.4	0.1389		-0.29
2379	IEC62321-8	0.1536		0.34	3185	CPSC-CH-C1001-09.4	0.1440		-0.07
2380		0.24324		4.19	3190	CPSC-CH-C1001-09.4	0.1394		-0.27

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3191	ISO8124-6	0.14291		-0.12					
3197	CPSC-CH-C1001-09.4	0.1346		-0.47					
3199	In house	0.171		1.09					
3209	CPSC-CH-C1001-09.4	0.1452		-0.02					
3210	In house	0.12955		-0.69					
3214	CPSC-CH-C1001-09.4	0.1458		0.01					
3218	CPSC-CH-C1001-09.3	0.1443		-0.06					
3225		----		----					
3228	CPSC-CH-C1001-09.4	0.1389		-0.29					
3237	CPSC-CH-C1001-09.4	0.116		-1.27					
3239		----		----					
3248	CPSC-CH-C1001-09.4	0.115		-1.31					
3250	In house	0.16	C	0.62					
8005		0.1824		1.58					
8006		0.1736		1.20					
8007		0.1787		1.42					
8008	JTSS ST2016	0.1625		0.73					
8015	In house	0.1230		-0.97					
8020	IEC62321-8	0.1384		-0.31					
8021	CPSC-CH-C1001-09.4	0.1401		-0.24					
8030	ST2016	0.1557		0.43					

normality suspect
 n 135
 outliers 4
 mean (n) 0.14561
 st.dev. (n) 0.029065 RSD = 20%
 R(calc.) 0.08138
 st.dev.(iis memo 1701) 0.023297
 R(iis memo 1701) 0.06523

- Lab 2230 first reported: 1380 %M/M
- Lab 2242 first reported: 0.2286
- Lab 2258 first reported: 0.24566
- Lab 2267 first reported: 0.041
- Lab 2320 first reported: 0.07116
- Lab 2431 first reported: 0.2298
- Lab 2489 reported: 1520 %M/M
- Lab 2857 first reported: 0.2697
- Lab 2870 first reported: 0.049
- Lab 2881 first reported: 0.00
- Lab 3250 first reported: switch samples, reported as #20605

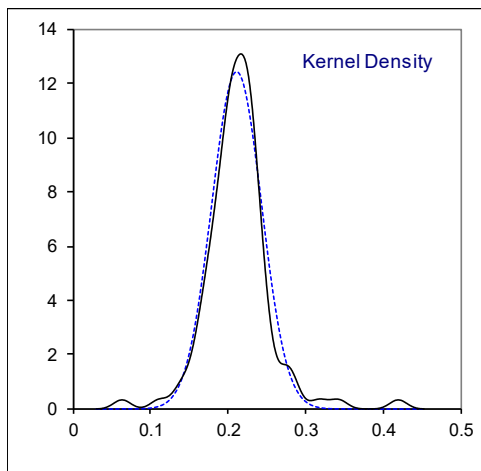
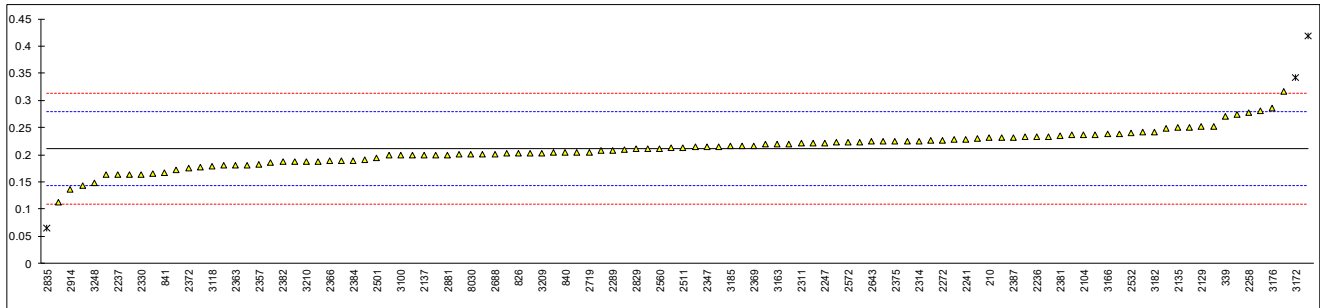


Determination of DMP – Dimethyl phthalate on sample #20606; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110		----		----	2381	CPSC-CH-C1001-09.4	0.2356		0.72
210	ISO14389	0.2308		0.57	2382	CPSC-CH-C1001-09.4	0.1870		-0.72
230		----		----	2384	IEC62321-8	0.18896		-0.66
339	In house	0.270		1.73	2386	CPSC-CH-C1001-09.4	0.2477		1.07
348	CPSC-CH-C1001-09.4	0.1631		-1.43	2387		0.23149		0.60
362		----		----	2390	ISO14389	0.230		0.55
523		----		----	2392		----		----
551	CPSC-CH-C1001-09.4	0.14265	C	-2.03	2410	CPSC-CH-C1001-09.4	0.2237		0.36
623	CPSC-CH-C1001-09.4	0.2745		1.87	2413		----		----
826	IEC62321-8	0.203		-0.25	2429	CPSC-CH-C1001-09.4	0.203		-0.25
840	CPSC-CH-C1001-09.4	0.2042		-0.21	2431		----		----
841	CPSC-CH-C1001-09.4	0.1662		-1.34	2442		----		----
1051		----		----	2453		----		----
1842		----		----	2460		----		----
1910		----		----	2475		----		----
2102		----		----	2476		----		----
2104		0.2371		0.76	2477	CPSC-CH-C1001-09.4	0.317		3.12
2115	ISO14389	0.252		1.20	2489	ISO14839:14	0.2373	C	0.77
2118	ISO14389	0.2363		0.74	2495	CPSC-CH-C1001-09.3	0.23251		0.63
2129	ISO17070Mod.	0.252		1.20	2500		----		----
2132	CPSC-CH-C1001-09.4	NA		----	2501	ISO14389	0.1933		-0.53
2135	ISO14389	0.250		1.14	2507		----		----
2137	KS M1991	0.20		-0.34	2510	In house	0.22525		0.41
2146		----		----	2511	CPSC-CH-C1001-09.4	0.213	C	0.05
2156	CPSC-CH-C1001-09.4	0.24195		0.90	2522		----		----
2165		----		----	2529		----		----
2170	CPSC-CH-C1001-09.4	0.2126		0.04	2532	CPSC-CH-C1001-09.4	0.2392		0.82
2184		----		----	2538		----		----
2201	CPSC-CH-C1001-09.4	0.2139		0.08	2560	CPSC-CH-C1001-09.4	0.2117		0.01
2202		----		----	2563	ISO14389	0.112		-2.94
2212	CPSC-CH-C1001-09.4	N/A		----	2567	CPSC-CH-C1001-09.4	0.2212		0.29
2218		----		----	2572	CPSC-CH-C1001-09.3	0.223		0.34
2230	CPSC-CH-C1001-09.4	0.225	C	0.40	2582		----		----
2236	In house	0.2332		0.65	2590	CPSC-CH-C1001-09.3	0.200		-0.34
2237	In house	0.1631		-1.43	2591	CPSC-CH-C1001-09.4	0.419	R1	6.14
2241	ISO8124-6	0.2275		0.48	2605	CPSC-CH-C1001-09.4	0.2111		-0.01
2242		----		----	2614	CPSC-CH-C1001-09.4	0.2382		0.79
2247	CPSC-CH-C1001-09.4	0.2221		0.32	2642		----		----
2256	CPSC-CH-C1001-09.4	0.226		0.43	2643	CPSC-CH-C1001-09.4	0.224		0.37
2258	CPSC-CH-C1001-09.3	0.277104		1.94	2649	ISO14839:14	0.1764		-1.03
2264		----		----	2674	CPSC-CH-C1001-09.4	N.A		----
2265	ISO14389	< 0,05	f-?	<-4.77	2678		----		----
2267		----		----	2688		0.20101	C	-0.31
2272		0.2264		0.44	2719	CPSC-CH-C1001-09.4	0.2051		-0.19
2288		----		----	2720	CPSC-CH-C1001-09.4	0.2042		-0.21
2289	ISO8124-6	0.2078		-0.11	2722		----		----
2290	CPSC-CH-C1001-09.4	0.219		0.23	2730		----		----
2293	CPSC-CH-C1001-09.4	0.2274		0.47	2736		----		----
2295	CPSC-CH-C1001-09.4	0.1641		-1.40	2741	ISO14389	0.2076		-0.11
2301	CPSC-CH-C1001-09.3	0.20		-0.34	2826		----		----
2310	CPSC-CH-C1001-09.4	0.2201		0.26	2829	CPSC-CH-C1001-09.4	0.211		-0.01
2311	ISO14389	0.2210		0.28	2835	EPA3545A/8270E	0.064128	R1	-4.35
2313	ISO14389	0.204		-0.22	2857		----		----
2314	ISO14389	0.2253		0.41	2864	IEC62321-8	0.222301		0.32
2316	IEC62321-8	na		----	2870	ISO14389	0.201		-0.31
2320	CPSC-CH-C1001-09.4	0.28046		2.04	2881		0.20		-0.34
2330	CPSC-CH-C1001-09.4	0.1643		-1.39	2900		----		----
2347	IEC62321-8	0.2140		0.08	2911		----		----
2350		0.2151		0.11	2914	In house	0.1363		-2.22
2352	EN14372	0.1899		-0.63	2925		----		----
2353	IEC62321-8	NA		----	2927		----		----
2355	IEC62321-8	0.187		-0.72	3100	CPSC-CH-C1001-09.4	0.1999		-0.34
2357	EN14372	0.182		-0.87	3110		----		----
2358	CPSC-CH-C1001-09.4	N/A		----	3116		----		----
2363	ISO14389	0.18		-0.93	3118	CPSC-CH-C1001-09.4	0.1787		-0.97
2365	CPSC-CH-C1001-09.4	0.18618		-0.74	3122		<0.025	f-?	<-5.51
2366	CPSC-CH-C1001-09.4	0.1884		-0.68	3153		----		----
2369	CPSC-CH-C1001-09.4	0.217		0.17	3154		0.199		-0.37
2370	IEC62321-8	0.180		-0.93	3163	In house	0.22		0.26
2372		0.1759		-1.05	3166	In house	0.238		0.79
2374	In house	0.1880		-0.69	3172	CPSC-CH-C1001-09.4	0.3423	R1	3.87
2375	EN14372	0.225		0.40	3176	CPSC-CH-C1001-09.4	0.286		2.21
2378	CPSC-CH-C1001-09.4	0.1884		-0.68	3182	CPSC-CH-C1001-09.4	0.2424		0.92
2379	IEC62321-8	0.1725		-1.15	3185	CPSC-CH-C1001-09.4	0.2158		0.13
2380		0.25019		1.15	3190	CPSC-CH-C1001-09.4	0.2164		0.15

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3191	ISO8124-6	0.20256		-0.26					
3197	CPSC-CH-C1001-09.4	0.2310		0.58					
3199	In house	0.209		-0.07					
3209	CPSC-CH-C1001-09.4	0.2030		-0.25					
3210	In house	0.18785		-0.70					
3214	CPSC-CH-C1001-09.4	0.2334		0.65					
3218	CPSC-CH-C1001-09.3	0.2004		-0.32					
3225		----		----					
3228		----		----					
3237		----		----					
3239	IEC62321-8	0.166		-1.34					
3248	CPSC-CH-C1001-09.4	0.148		-1.87					
3250	In house	0.18	C	-0.93					
8005		----		----					
8006		----		----					
8007		----		----					
8008		----		----					
8015		----		----					
8020		----		----					
8021		----		----					
8030	ST2016	0.2009		-0.31					
	normality	suspect							
	n	105							
	outliers	3							
	mean (n)	0.21136							
	st.dev. (n)	0.032030	RSD = 15%						
	R(calc.)	0.08968							
	st.dev.(iis memo 1701)	0.033818							
	R(iis memo 1701)	0.09469							

Lab 551 first reported: 0.347943
 Lab 2230 first reported: 2250 %M/M
 Lab 2489 reported: 2373 %M/M
 Lab 2511 first reported: 0.3430
 Lab 2688 first reported: 2.01013
 Lab 3250 first reported: switch samples, reported as #20605

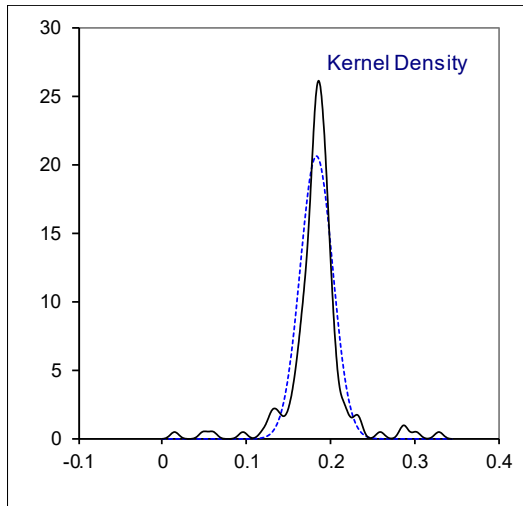
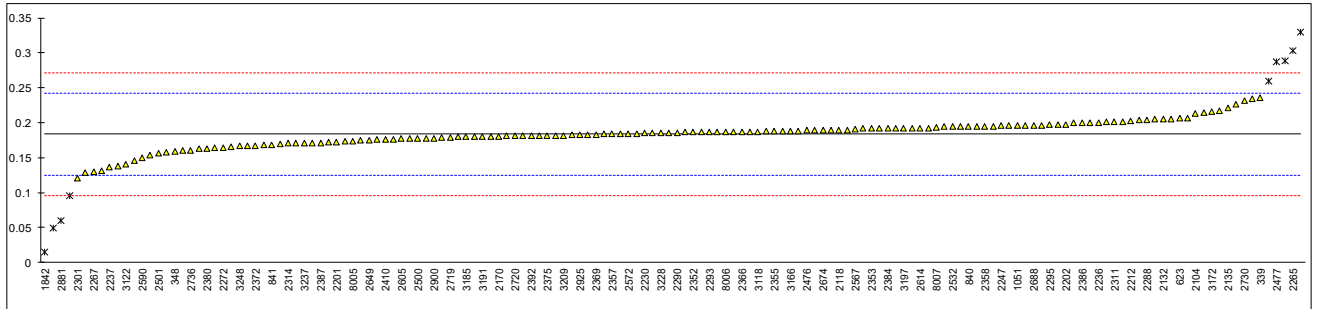


Determination of DIBP – Di-iso-butyl phthalate on sample #20606; results in %M/M

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
110	CPSC-CH-C1001-09.4	0.1671		-0.57	2381	CPSC-CH-C1001-09.4	0.1712		-0.43
210	ISO14389	0.1883		0.15	2382	CPSC-CH-C1001-09.4	0.1870		0.11
230	-----	-----		-----	2384	IEC62321-8	0.19195		0.28
339	In house	0.235		1.74	2386	CPSC-CH-C1001-09.4	0.1999		0.55
348	CPSC-CH-C1001-09.4	0.1587		-0.85	2387	-----	0.1714		-0.42
362	-----	-----		-----	2390	ISO14389	0.215		1.06
523	CPSC-CH-C1001-09.4	0.13815		-1.55	2392	IEC62321-8	0.1818		-0.07
551	CPSC-CH-C1001-09.4	0.20477	C	0.71	2410	CPSC-CH-C1001-09.4	0.1758		-0.27
623	CPSC-CH-C1001-09.4	0.206	C	0.76	2413	-----	-----		-----
826	IEC62321-8	0.190		0.21	2429	CPSC-CH-C1001-09.4	0.181		-0.09
840	CPSC-CH-C1001-09.4	0.1948		0.38	2431	CPSC-CH-C1001-09.4	0.2035		0.67
841	CPSC-CH-C1001-09.4	0.1684		-0.52	2442	CPSC-CH-C1001-09.4	0.184		0.01
1051	GB22048	0.1956		0.40	2453	ISO14389	0.234		1.71
1842	In house	0.0143	R1	-5.76	2460	-----	-----		-----
1910	In house	0.18764		0.13	2475	-----	-----		-----
2102	In house	0.1915		0.26	2476	CPSC-CH-C1001-09.4	0.1890		0.18
2104	-----	0.2135		1.01	2477	CPSC-CH-C1001-09.4	0.287	R1	3.51
2115	ISO14389	0.260	R5	2.59	2489	ISO14839:14	0.1861	C	0.08
2118	ISO14389	0.1899		0.21	2495	CPSC-CH-C1001-09.3	0.17936		-0.15
2129	ISO17070Mod.	0.194		0.35	2500	CPSC-CH-C1001-09.4	0.1773		-0.22
2132	CPSC-CH-C1001-09.4	0.2055		0.74	2501	ISO14389	0.1558		-0.95
2135	ISO14389	0.221		1.27	2507	-----	-----		-----
2137	KS M1991	0.16		-0.81	2510	In house	0.18275		-0.03
2146	-----	-----		-----	2511	CPSC-CH-C1001-09.4	0.217		1.13
2156	CPSC-CH-C1001-09.4	0.19955		0.54	2522	CPSC-CH-C1001-09.4	0.182		-0.06
2165	CPSC-CH-C1001-09.4	0.1823		-0.05	2529	-----	-----		-----
2170	CPSC-CH-C1001-09.4	0.1806		-0.11	2532	CPSC-CH-C1001-09.4	0.1940		0.35
2184	ISO8124-6	0.1951		0.39	2538	-----	-----		-----
2201	CPSC-CH-C1001-09.4	0.1720		-0.40	2560	CPSC-CH-C1001-09.4	0.1918		0.27
2202	IEC62321-8	0.1974		0.46	2563	ISO14389	0.096	R1	-2.99
2212	CPSC-CH-C1001-09.4	0.2025		0.64	2567	CPSC-CH-C1001-09.4	0.1912		0.25
2218	CPSC-CH-C1001-09.4	0.1869		0.11	2572	CPSC-CH-C1001-09.3	0.184		0.01
2230	CPSC-CH-C1001-09.4	0.185	C	0.04	2582	ISO14389	0.18411	C	0.01
2236	In house	0.2005		0.57	2590	CPSC-CH-C1001-09.3	0.150		-1.15
2237	In house	0.1358		-1.63	2591	CPSC-CH-C1001-09.4	0.289	R1	3.58
2241	ISO8124-6	0.1871		0.11	2605	CPSC-CH-C1001-09.4	0.1771		-0.23
2242	CPSC-CH-C1001-09.4	0.1536		-1.03	2614	CPSC-CH-C1001-09.4	0.1924		0.29
2247	CPSC-CH-C1001-09.4	0.1954		0.40	2642	CPSC-CH-C1001-09.4	0.2007		0.58
2256	CPSC-CH-C1001-09.4	0.330	R1	4.97	2643	-----	-----		-----
2258	CPSC-CH-C1001-09.3	N/D		-----	2649	ISO14839:14	0.1751		-0.29
2264	-----	-----		-----	2674	CPSC-CH-C1001-09.4	0.1894		0.19
2265	ISO14389	0.3027	R1	4.04	2678	CPSC-CH-C1001-09.4	0.1290		-1.86
2267	-----	0.13		-1.83	2688	-----	0.19599	C	0.42
2272	-----	0.1648		-0.65	2719	CPSC-CH-C1001-09.4	0.1794		-0.15
2288	CPSC-CH-C1001-09.3	0.20372		0.68	2720	CPSC-CH-C1001-09.4	0.1811		-0.09
2289	ISO8124-6	0.1776		-0.21	2722	CPSC-CH-C1001-09.4	0.2003		0.56
2290	CPSC-CH-C1001-09.4	0.186		0.08	2730	ISO14389	0.232	C	1.64
2293	CPSC-CH-C1001-09.4	0.1866		0.10	2736	In house	0.160		-0.81
2295	CPSC-CH-C1001-09.4	0.1971		0.45	2741	ISO14389	0.1834		-0.01
2301	CPSC-CH-C1001-09.3	0.12		-2.17	2826	CPSC-CH-C1001-09.4	0.1920		0.28
2310	CPSC-CH-C1001-09.4	0.1716		-0.41	2829	CPSC-CH-C1001-09.4	0.175		-0.30
2311	ISO14389	0.2010		0.59	2835	EPA3545A/8270E	0.048608	R1	-4.60
2313	ISO14389	0.157		-0.91	2857	IEC62321-8	0.1924		0.29
2314	ISO14389	0.1706		-0.45	2864	IEC62321-8	0.205766		0.75
2316	IEC62321-8	0.14621		-1.28	2870	ISO14389	0.164		-0.67
2320	CPSC-CH-C1001-09.4	0.19560		0.40	2881	-----	0.06	C,R1	-4.21
2330	CPSC-CH-C1001-09.4	0.1756		-0.28	2900	CPSC-CH-C1001-09.3	0.1780		-0.20
2347	IEC62321-8	0.1853		0.05	2911	CPSC-CH-C1001-09.4	0.188		0.14
2350	-----	0.1946		0.37	2914	In house	0.1772		-0.22
2352	EN14372	0.1865		0.09	2925	EN62321-8	0.1827		-0.04
2353	IEC62321-8	0.1918		0.27	2927	IEC62321-8	0.174		-0.33
2355	IEC62321-8	0.1878		0.14	3100	CPSC-CH-C1001-09.4	0.1815		-0.08
2357	EN14372	0.184		0.01	3110	CPSC-CH-C1001-09.4	0.1956		0.40
2358	CPSC-CH-C1001-09.4	0.1950	C	0.38	3116	CPSC-CH-C1001-09.4	0.20129		0.60
2363	ISO14389	0.1805		-0.11	3118	CPSC-CH-C1001-09.4	0.1871		0.11
2365	CPSC-CH-C1001-09.4	0.18961		0.20	3122	-----	0.14		-1.49
2366	CPSC-CH-C1001-09.4	0.1870		0.11	3153	CPSC-CH-C1001-09.4	0.1948		0.38
2369	CPSC-CH-C1001-09.4	0.183		-0.03	3154	-----	0.168		-0.54
2370	IEC62321-8	0.180		-0.13	3163	-----	-----		-----
2372	-----	0.1671		-0.57	3166	In house	0.188		0.14
2374	In house	0.1866		0.10	3172	CPSC-CH-C1001-09.4	0.2160		1.10
2375	EN14372	0.182		-0.06	3176	CPSC-CH-C1001-09.4	0.227		1.47
2378	CPSC-CH-C1001-09.4	0.1857		0.07	3182	CPSC-CH-C1001-09.4	0.2070		0.79
2379	IEC62321-8	0.1963		0.43	3185	CPSC-CH-C1001-09.4	0.1798		-0.13
2380	-----	0.16332		-0.70	3190	CPSC-CH-C1001-09.4	0.1764		-0.25

lab	method	value	mark	z(targ)	lab	method	value	mark	z(targ)
3191	ISO8124-6	0.18042		-0.11					
3197	CPSC-CH-C1001-09.4	0.1923		0.29					
3199	In house	0.165		-0.64					
3209	CPSC-CH-C1001-09.4	0.1820		-0.06					
3210	In house	0.17085		-0.44					
3214	CPSC-CH-C1001-09.4	0.1818		-0.07					
3218	CPSC-CH-C1001-09.3	0.1797		-0.14					
3225	CPSC-CH-C1001-09.4	0.189		0.18					
3228	CPSC-CH-C1001-09.4	0.1853		0.05					
3237	CPSC-CH-C1001-09.4	0.171		-0.43					
3239	IEC62321-8	0.131		-1.79					
3248	CPSC-CH-C1001-09.4	0.167		-0.57					
3250	In house	0.17	C	-0.47					
8005		0.1740		-0.33					
8006		0.1869		0.11					
8007		0.1936		0.33					
8008		----		----					
8015		----		----					
8020	IEC62321-8	0.1972		0.46					
8021	CPSC-CH-C1001-09.4	0.1923		0.29					
8030	ST2016	0.1630		-0.71					
normality		suspect							
n		147							
outliers		9							
mean (n)		0.18377							
st.dev. (n)		0.019384		RSD = 11%					
R(calc.)		0.05427							
st.dev.(iis memo 1701)		0.029403							
R(iis memo 1701)		0.08233							

Lab 551 first reported: 0.317928
 Lab 623 first reported: 0.2895
 Lab 2230 first reported: 1850
 Lab 2358 first reported: n.d.
 Lab 2489 first reported: 1861 %M/M
 Lab 2582 first reported: n.d.
 Lab 2688 first reported: 1.95993
 Lab 2730 first reported: switch samples, reported as #20605
 Lab 2881 first reported: 0.80
 Lab 3250 first reported: switch samples, reported as #20605



APPENDIX 2

Other reported Phthalates in sample #20605; results in %M/M

DEHP = Di-2-ethylhexylphthalate DEP = Diethylphthalate
 DIDP = Diisodecylphthalate DNHP = Di-n-hexylphthalate
 DINP = Diisononylphthalate DIBP = Diisobutylphthalate
 DNOP = Di-n-octylphthalate

Lab	DEHP	DIDP	DINP	DNOP	DEP	DNHP	DIBP
110	ND	ND	ND	ND	----	----	ND
210	----	----	----	----	----	----	----
230	----	----	----	----	----	----	----
339	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00149
348	<0,005	<0,005	<0,005	<0,005	<0,005	<0,005	<0,005
362	----	----	----	----	----	----	----
523	<0.015	<0.015	<0.015	<0.015	----	<0.015	<0.015
551	----	----	----	----	----	----	----
623	ND	ND	ND	ND	ND	ND	ND
826	----	----	----	----	----	----	----
840	not detected	not detected	not detected	not detected	not detected	not detected	not detected
841	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1051	----	----	----	----	----	----	----
1842	0.0002	----	----	----	----	----	0.0147
1910	----	----	----	----	----	----	----
2102	----	----	----	----	----	----	----
2104	----	----	----	----	0.00063	----	0.00125
2115	----	----	----	----	----	----	----
2118	0	0	0	0	0	0	0
2129	< 0.002	< 0.002	0.0057	< 0.002	< 0.002	< 0.002	< 0.002
2132	<0.01	<0.01	<0.01	<0.01	NA	<0.01	<0.01
2135	0.0098	----	----	----	----	----	----
2137	----	----	----	----	----	----	----
2146	----	----	----	----	----	----	----
2156	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00680
2165	<RL	<RL	<RL	<RL	----	<RL	<RL
2170	----	----	----	----	----	----	----
2184	< RL	< RL	< RL	< RL	----	----	< RL
2201	ND	ND	ND	ND	ND	ND	ND
2202	N.D.	N.D.	N.D.	N.D.	----	N.D.	N.D.
2212	<0.01	<0.01	<0.01	<0.01	N/A	<0.01	<0.01
2218	----	----	----	----	----	----	----
2230	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2236	----	----	----	----	----	----	----
2237	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
2241	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2242	----	----	----	----	----	----	----
2247	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2256	----	----	----	----	----	----	----
2258	N/D	N/D	N/D	N/D	N/D	N/D	N/D
2264	----	----	----	----	----	----	----
2265	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05
2267	----	----	----	----	----	----	0.0005
2272	----	----	----	----	----	----	----
2288	<0.01	----	----	----	----	----	<0.01
2289	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2290	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2293	ND	ND	ND	ND	ND	ND	ND
2295	----	----	----	----	----	----	----
2301	----	----	----	----	----	----	----
2310	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	----	----	----	----	----	----	----
2314	----	----	----	----	----	----	----
2316	n.d	n.d	n.d	n.d	NA	NA	NA
2320	----	----	----	----	----	----	----
2330	ND	ND	ND	ND	ND	ND	ND
2347	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2350	----	----	----	----	----	----	----
2352	----	----	----	----	----	----	----
2353	ND	ND	ND	ND	NA	NA	ND
2355	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2357	----	----	----	----	----	----	----
2358	n.d.	N/A	n.d.	N/A	N/A	n.d.	n.d.
2363	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2365	0.005	0.005	0.005	0.005	0.005	0.005	0.005
2366	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015

Lab	DEHP	DIDP	DINP	DNOP	DEP	DNHP	DIBP
2369	<0.005	<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	<0.00500
2372	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
2374	----	----	----	----	----	----	----
2375	----	----	----	----	----	----	----
2378	----	----	----	----	----	----	----
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2380	----	----	----	----	----	----	----
2381	----	----	----	----	----	----	----
2382	0.005	0.005	0.005	0.005	0.005	0.005	0.005
2384	N.D.[<0.005]	N.D.[<0.010]	N.D.[<0.010]	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.005]
2386	----	----	----	----	----	----	0.0176
2387	----	----	----	----	----	----	----
2390	----	----	----	----	----	----	----
2392	Not detected	Not detected	Not detected	Not detected	----	----	Not detected
2410	----	----	----	----	----	----	----
2413	0.9566	----	----	----	----	----	----
2429	ND	ND	ND	ND	ND	ND	ND
2431	----	----	----	----	----	----	----
2442	nd	nd	nd	nd	nd	nd	nd
2453	----	----	----	----	----	----	----
2460	----	----	----	----	----	----	----
2475	----	----	----	----	----	----	----
2476	ND	ND	ND	ND	----	ND	ND
2477	<0.002	0.005	0.007	<0.002	<0.002	<0.002	<0.002
2489	ND	ND	ND	ND	ND	ND	ND
2495	0.00105	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2500	N.D.	N.D.	N.D.	N.D.	----	N.D.	N.D.
2501	----	----	----	----	----	----	----
2507	----	----	----	----	----	----	----
2510	----	----	----	----	----	0.09850	----
2511	----	----	----	----	----	----	----
2522	<0.01	----	<0.01	<0.01	----	<0.01	<0.01
2529	----	----	----	----	----	----	----
2532	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2538	----	----	----	----	----	----	----
2560	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2563	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
2567	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2572	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2582	ND	ND	ND	ND	----	ND	ND
2590	----	----	----	----	----	----	----
2591	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2605	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2614	ND	ND	ND	ND	ND	ND	ND
2642	<0.03	----	<0.03	----	----	<0.03	<0.03
2643	----	----	----	----	----	----	----
2649	ND	ND	ND	ND	ND	ND	ND
2674	<RL	N.A	<RL	N.A	N.A	<RL	<RL
2678	n.d	----	n.d	----	----	n.d	n.d
2688	----	----	----	----	----	----	----
2719	----	----	----	----	----	----	----
2720	ND	ND	ND	ND	ND	ND	ND
2722	----	----	----	----	----	----	----
2730	----	----	----	----	----	----	----
2736	<0.01	<0.01	<0.01	<0.01	<0.01	----	<0.01
2741	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
2826	----	----	----	----	----	----	----
2829	----	----	----	----	----	----	----
2835	----	----	----	----	----	----	----
2857	ND	ND	ND	ND	----	ND	ND
2864	N.D.	N.D.	N.D.	N.D.	N.D.	----	N.D.
2870	----	----	----	----	----	----	----
2881	0.05	0.00	0.00	0.00	0.00	0.00	0.06
2900	N.D	----	----	----	----	----	N.D
2911	----	----	----	----	----	----	----
2914	----	----	0.1636	----	----	----	----
2925	----	----	----	----	----	----	----
2927	n.d	----	----	----	----	----	n.d
3100	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3110	----	----	----	----	----	----	----
3116	----	----	----	----	----	----	----
3118	----	----	----	----	----	----	----
3122	<0.0025	<0.0025	<0.0025	<0.0025	<0.025	<0.025	<0.0025
3153	----	----	----	----	----	----	----
3154	----	----	----	----	----	----	----
3163	----	----	----	----	----	----	6.76

Lab	DEHP	DIDP	DINP	DNOP	DEP	DNHP	DIBP
3166	<0.002	<0.05	<0.05	<0.02	<0.002	<0.002	<0.002
3172	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3176	----	----	----	----	----	----	----
3182	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090
3185	<0.0100	<0.0100	<0.0100	<0.0100	----	<0.0100	<0.0100
3190	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3191	----	----	----	----	----	----	----
3197	n.d	n.d	n.d	n.d	n.d	n.d	n.d
3199	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3209	----	----	----	----	----	----	----
3210	----	----	----	----	----	----	----
3214	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3218	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3225	<0.005	----	<0.005	----	----	<0.005	<0.005
3228	<RL	<RL	<RL	<RL	----	<RL	<RL
3237	----	----	----	----	----	----	----
3239	0.076	----	----	----	----	----	----
3248	----	----	----	----	----	----	----
3250	----	----	----	----	----	----	----
8005	----	----	----	----	----	----	----
8006	----	----	----	----	----	----	----
8007	----	----	----	----	----	----	----
8008	----	----	----	----	----	----	----
8015	----	----	----	----	----	----	----
8020	< RL	< RL	< RL	< RL	----	----	< RL
8021	< RL	< RL	< RL	< RL	----	< RL	< RL
8030	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

Other reported Phthalates in sample #20605; results in %M/M ---continued---

DPHP = Di(2-propylheptyl)phthalate DPrP = Diproylphthalate
 DNPP = Di-n-pentylphthalate DMEP = Di(2-methoxyethyl)phthalate
 DUP = Diundecylphthalate

Lab	DPHP	DNPP	DUP	DPrP	DMEP	Total Other Phthalates
110	----	ND	----	----	----	----
210	----	----	----	----	----	----
230	----	----	----	----	----	----
339	----	----	----	----	----	----
348	----	<0,005	----	----	----	----
362	----	----	----	----	----	----
523	----	<0.015	----	----	----	----
551	----	----	----	----	----	----
623	ND	ND	ND	ND	ND	----
826	----	----	----	----	----	----
840	not detected	not detected	not detected	not detected	not detected	----
841	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1051	----	----	----	----	----	----
1842	----	----	----	----	----	----
1910	----	----	----	----	----	----
2102	----	----	----	----	----	----
2104	----	----	----	----	----	----
2115	----	----	----	----	----	----
2118	----	0	0	0	0	----
2129	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
2132	NA	<0.01	NA	NA	NA	NA
2135	----	----	----	----	----	----
2137	----	----	----	----	----	----
2146	----	----	----	----	----	----
2156	----	<0.01	----	----	<0.01	----
2165	----	<RL	----	----	----	----
2170	----	----	----	----	----	----
2184	----	----	----	----	----	----
2201	ND	ND	ND	ND	ND	0.7375
2202	----	----	----	----	----	----
2212	N/A	<0.01	N/A	N/A	N/A	N/A
2218	----	----	----	----	----	----
2230	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2236	----	----	----	----	----	----
2237	<0,01	<0,01	----	<0,01	<0,01	----
2241	----	<0.005	----	<0.005	<0.005	----
2242	----	----	----	----	----	----
2247	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2256	----	----	----	----	----	----
2258	N/D	N/D	N/D	N/D	N/D	N/D
2264	----	----	----	----	----	----
2265	----	< 0,05	< 0,05	< 0,05	< 0,05	----
2267	----	----	----	----	----	----
2272	----	----	----	----	----	----
2288	----	----	----	----	----	----
2289	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2290	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2293	ND	ND	ND	ND	ND	ND
2295	----	----	----	----	----	----
2301	----	----	----	----	----	----
2310	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	----	----	----	----	----	----
2314	----	----	----	----	----	----
2316	NA	NA	NA	NA	NA	NA
2320	----	----	----	----	----	----
2330	ND	ND	ND	ND	ND	ND
2347	<0.005	<0.005	<0.005	<0.005	<0.005	----
2350	----	----	----	----	----	----
2352	----	----	----	----	----	----
2353	NA	NA	NA	NA	NA	NA
2355	<0.005	<0.005	<0.005	<0.005	<0.005	----
2357	----	----	----	----	----	----
2358	N/A	n.d.	N/A	N/A	N/A	N/A
2363	<0.005	<0.005	<0.005	<0.005	<0.005	0.641
2365	0.0050	0.005	0.005	0.005	0.005	----
2366	<0.015	<0.015	<0.015	<0.015	<0.015	Not conducted
2369	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Lab	DPHP	DNPP	DUP	DPpP	DMEP	Total Other Phthalates
2370	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
2372	n.d.	n.d.	n.d.	n.d.	n.d.	0.6411
2374	----	----	----	----	----	0.6566
2375	----	----	----	----	----	----
2378	----	----	----	----	----	----
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not tested
2380	----	----	----	----	----	----
2381	----	----	----	----	----	----
2382	0.0050	0.005	0.005	0.005	0.005	0.005
2384	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.005]	----
2386	----	----	----	----	----	----
2387	----	----	----	----	----	----
2390	----	----	----	----	----	----
2392	----	----	----	----	----	----
2410	----	----	----	----	----	----
2413	----	----	----	----	----	----
2429	ND	ND	ND	ND	ND	ND
2431	----	----	----	----	----	----
2442	----	nd	nd	nd	nd	0.6196
2453	----	----	----	----	----	----
2460	----	----	----	----	----	----
2475	----	----	----	----	----	----
2476	----	ND	----	----	----	----
2477	----	<0.002	----	----	----	----
2489	ND	ND	ND	ND	ND	ND
2495	<0.001	<0.001	<0.001	<0.001	<0.001	----
2500	----	N.D.	----	----	----	----
2501	----	----	----	----	----	----
2507	----	----	----	----	----	----
2510	----	----	----	----	----	----
2511	----	----	----	----	----	----
2522	----	<0.01	----	----	----	----
2529	----	----	----	----	----	----
2532	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2538	----	----	----	----	----	----
2560	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2563	----	n.d.	----	n.d.	n.d.	----
2567	----	<0.01	<0.01	<0.01	<0.01	<0.01
2572	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2582	----	ND	----	ND	ND	----
2590	----	----	----	----	----	----
2591	----	<0.005	----	----	<0.005	----
2605	----	<0.01	<0.01	<0.01	<0.01	----
2614	ND	ND	ND	ND	ND	----
2642	----	<0.03	----	----	----	----
2643	----	----	----	----	----	----
2649	ND	ND	ND	ND	ND	ND
2674	N.A	<RL	N.A	N.A	N.A	----
2678	----	n.d	----	----	----	----
2688	----	----	----	----	----	----
2719	----	----	----	----	----	----
2720	ND	ND	ND	ND	ND	----
2722	----	----	----	----	----	----
2730	----	----	----	----	----	----
2736	----	----	----	----	----	----
2741	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	----
2826	----	----	----	----	----	----
2829	----	----	----	----	----	----
2835	----	----	----	----	----	----
2857	----	ND	----	----	----	----
2864	----	----	----	----	----	----
2870	----	----	----	----	----	----
2881	0.00	0.00	0.00	0.00	0.00	0.00
2900	----	----	----	----	----	----
2911	----	----	----	----	----	----
2914	----	----	----	----	----	----
2925	----	----	----	----	----	----
2927	----	----	----	----	----	----
3100	----	<0.010	----	<0.010	<0.010	----
3110	----	----	----	----	----	----
3116	----	----	----	----	----	----
3118	----	----	----	----	----	----
3122	----	----	----	<0.025	<0.025	----
3153	----	----	----	----	----	----
3154	----	----	----	----	----	----
3163	----	----	----	----	----	----
3166	----	<0.002	----	----	----	----
3172	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

Lab	DPHP	DNPP	DUP	DPrP	DMEP	Total Other Phthalates
3176	----	----	----	----	----	----
3182	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	----
3185	----	<0.0100	----	----	----	----
3190	----	<0.01	----	<0.01	<0.01	----
3191	----	----	----	----	----	----
3197	n.d	n.d	n.d	n.d	n.d	----
3199	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3209	----	----	----	----	----	----
3210	----	----	----	----	----	----
3214	<0.005	<0.005	<0.005	<0.005	<0.005	0.6952
3218	<0.01	<0.01	<0.01	<0.01	<0.01	0.7106
3225	----	<0.005	----	----	----	----
3228	----	<RL	----	----	----	----
3237	----	----	----	----	----	----
3239	----	----	----	----	----	----
3248	----	----	----	----	----	----
3250	----	----	----	----	----	----
8005	----	----	----	----	----	----
8006	----	----	----	----	----	----
8007	----	----	----	----	----	----
8008	----	----	----	----	----	----
8015	----	----	----	----	----	----
8020	----	----	----	----	----	----
8021	----	< RL	----	----	----	----
8030	Not detected	Not detected	Not detected	Not detected	Not detected	----

Other reported Phthalates in sample #20606; results in %M/M

BBP = Benzylbutylphthalate DCHP = Dicyclohexylphthalate
 DBP = Dibutylphthalate DEP = Diethylphthalate
 DINP = Diisononylphthalate DNHP = Di-n-hexylphthalate
 DNOP = Di-n-octylphthalate

Lab	BBP	DBP	DINP	DNOP	DCHP	DEP	DNHP
110	ND	ND	0.0197	ND	ND	----	----
210	----	----	----	----	----	----	----
230	----	----	----	----	----	----	----
339	<0.005	<0.005	0.0071	<0.005	<0.005	<0.005	<0.005
348	<0,005	<0,005	<0,005	<0,005	<0,005	<0,005	<0,005
362	----	----	----	----	----	----	----
523	<0.015	<0.015	<0.015	<0.015	<0.015	----	<0.015
551	----	----	----	----	----	----	----
623	ND	ND	ND	ND	ND	ND	ND
826	----	----	----	----	----	----	----
840	not detected	not detected	not detected	not detected	not detected	not detected	not detected
841	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1051	----	----	----	----	----	----	----
1842	Not detected	0.0178	----	----	----	----	----
1910	----	----	----	----	----	----	----
2102	----	----	----	----	----	----	----
2104	----	0.00069	----	----	----	----	----
2115	----	----	----	----	----	----	----
2118	0	0	0	0	0	0	0
2129	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
2132	<0.01	<0.01	<0.01	<0.01	<0.01	NA	<0.01
2135	----	----	----	----	----	----	----
2137	----	----	----	----	----	----	----
2146	----	----	----	----	----	----	----
2156	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2165	<RL	<RL	<RL	<RL	<RL	----	<RL
2170	----	----	----	----	----	----	----
2184	< RL	< RL	< RL	< RL	----	----	----
2201	ND	ND	ND	ND	ND	ND	ND
2202	N.D.	N.D.	N.D.	N.D.	----	----	N.D.
2212	<0.01	<0.01	<0.01	<0.01	<0.01	N/A	<0.01
2218	----	----	----	----	----	----	----
2230	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2236	----	----	----	----	----	----	----
2237	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01
2241	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2242	----	----	----	----	----	----	----
2247	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2256	----	----	----	----	----	----	----
2258	N/D	N/D	N/D	N/D	N/D	N/D	N/D
2264	----	----	----	----	----	----	----
2265	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05
2267	----	0.0006	----	----	----	----	----
2272	----	----	----	----	----	----	----
2288	<0.01	<0.01	----	----	----	----	----
2289	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2290	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2293	ND	ND	ND	ND	ND	ND	ND
2295	----	----	----	----	----	----	----
2301	----	----	----	----	----	----	----
2310	Not Detected	Not Detected	<0.01	Not Detected	Not Detected	Not Detected	Not Detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	----	----	----	----	----	----	----
2314	----	----	----	----	----	----	----
2316	nd	nd	0.00971	nd	na	na	na
2320	----	----	----	----	----	----	----
2330	ND	ND	ND	ND	ND	ND	ND
2347	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2350	----	----	----	----	----	----	----
2352	----	----	----	----	----	----	----
2353	ND	ND	ND	ND	NA	NA	NA
2355	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2357	----	----	----	----	----	----	----
2358	n.d.	n.d.	n.d.	N/A.	n.d.	N/A	n.d.
2363	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2365	0.005	0.005	0.005	0.005	0.005	0.005	0.005
2366	<0.015	<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	<0.005

Lab	BBP	DBP	DINP	DNOP	DCHP	DEP	DNHP
2370	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
2372	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
2374	----	----	----	----	----	----	----
2375	----	----	----	----	----	----	----
2378	----	----	----	----	----	----	----
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2380	----	----	----	----	----	----	----
2381	----	----	----	----	----	----	----
2382	0.005	0.005	0.005	0.005	0.005	0.005	0.005
2384	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.010]	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.005]
2386	----	----	----	----	----	----	----
2387	----	----	----	----	----	----	----
2390	----	----	----	----	----	----	----
2392	Not detected	Not detected	Not detected	Not detected	----	----	----
2410	----	----	----	----	----	----	----
2413	----	----	----	----	0.0893	----	----
2429	ND	ND	ND	ND	ND	ND	ND
2431	----	----	----	----	----	----	----
2442	nd	nd	nd	nd	nd	nd	nd
2453	----	----	----	----	----	----	----
2460	----	----	----	----	----	----	----
2475	----	----	----	----	----	----	----
2476	ND	ND	ND	ND	ND	----	ND
2477	<0.002	<0.002	0.009	<0.002	<0.002	<0.002	<0.002
2489	ND	ND	ND	ND	ND	ND	ND
2495	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2500	N.D.	N.D.	N.D.	N.D.	N.D.	----	N.D.
2501	----	----	----	----	----	----	----
2507	----	----	----	----	----	----	----
2510	----	----	----	----	----	----	----
2511	----	----	----	----	----	----	----
2522	<0.01	<0.01	<0.01	<0.01	<0.01	----	<0.01
2529	----	----	----	----	----	----	----
2532	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2538	----	----	----	----	----	----	----
2560	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2563	----	----	----	----	----	----	----
2567	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2572	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2582	ND	ND	ND	ND	ND	----	ND
2590	----	----	----	----	----	----	----
2591	<0.005	<0.005	0.015	<0.005	<0.005	<0.005	<0.005
2605	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2614	ND	ND	ND	ND	ND	ND	ND
2642	<0.03	<0.03	<0.03	----	<0.03	----	<0.03
2643	----	----	----	----	----	----	----
2649	ND	ND	ND	ND	ND	ND	ND
2674	<RL	<RL	<RL	N.A	<RL	N.A	<RL
2678	n.d	n.d	n.d	----	n.d	----	n.d
2688	----	----	----	----	----	----	----
2719	----	----	----	----	----	----	----
2720	ND	ND	ND	ND	ND	ND	ND
2722	----	----	----	----	----	----	----
2730	----	----	----	----	----	----	----
2736	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	----
2741	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
2826	----	----	----	----	----	----	----
2829	----	----	----	----	----	----	----
2835	----	----	----	----	----	----	----
2857	ND	ND	ND	ND	----	----	ND
2864	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	----
2870	----	----	----	----	----	----	----
2881	0.00	0.12	0.00	0.00	0.00	0.00	0.00
2900	N.D	N.D	----	----	----	----	----
2911	----	----	----	----	----	----	----
2914	----	----	0.1404	----	----	----	----
2925	----	----	----	----	----	----	----
2927	n.d	n.d	----	----	----	----	----
3100	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
3110	----	----	----	----	----	----	----
3116	----	----	----	----	----	----	----
3118	----	----	----	----	----	----	----
3122	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.025	<0.0025
3153	----	----	----	----	----	----	----
3154	----	----	0.00818	----	----	----	----
3163	----	----	----	----	----	----	----
3166	<0.002	<0.002	<0.05	<0.02	----	<0.002	<0.002
3172	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

Lab	BBP	DBP	DINP	DNOP	DCHP	DEP	DNHP
3176	----	----	----	----	----	----	----
3182	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090
3185	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	----	<0.0100
3190	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3191	----	----	----	----	----	----	----
3197	n.d	n.d	n.d	n.d	n.d	n.d	n.d
3199	<0.005	<0.005	0.018	<0.005	<0.005	<0.005	<0.005
3209	----	----	----	----	----	----	----
3210	----	----	----	----	----	----	----
3214	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3218	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
3225	<0.005	<0.005	<0.005	----	<0.005	----	<0.005
3228	<RL	<RL	<RL	<RL	<RL	----	<RL
3237	----	----	----	----	----	----	----
3239	----	----	----	----	0.326	----	----
3248	----	----	----	----	----	----	----
3250	----	----	----	----	----	----	----
8005	----	----	----	----	----	----	----
8006	----	----	----	----	----	----	----
8007	----	----	----	----	----	----	----
8008	----	----	----	----	----	----	----
8015	----	----	----	----	----	----	----
8020	< RL	< RL	< RL	< RL	----	----	----
8021	< RL	< RL	< RL	< RL	< RL	----	< RL
8030	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

Other reported Phthalates in sample #20606; results in %M/M ---continued---

DPHP = Di(2-propylheptyl)phthalate DPrP = Dipropylphthalate
 DNPP = Di-n-pentylphthalate DMEP = Di(2-methoxyethyl)phthalate
 DUP = Diundecylphthalate

Lab	DPHP	DNPP	DUP	DPrP	DMEP	Total Other Phthalates
110	----	ND	----	----	----	----
210	----	----	----	----	----	----
230	----	----	----	----	----	----
339	----	----	----	----	----	----
348	----	<0,005	----	----	----	----
362	----	----	----	----	----	----
523	----	----	----	----	----	----
551	----	----	----	----	----	----
623	ND	ND	ND	ND	ND	----
826	----	----	----	----	----	----
840	not detected	not detected	not detected	not detected	not detected	----
841	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
1051	----	----	----	----	----	----
1842	----	----	----	----	----	----
1910	----	----	----	----	----	----
2102	----	----	----	----	----	----
2104	----	----	----	----	----	----
2115	----	----	----	----	----	----
2118	----	0	0	0	0	----
2129	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
2132	NA	<0.01	NA	NA	NA	NA
2135	----	----	----	----	----	----
2137	----	----	----	----	----	----
2146	----	----	----	----	----	----
2156	----	<0.01	----	----	<0.01	----
2165	----	<RL	----	----	----	----
2170	----	----	----	----	----	----
2184	----	----	----	----	----	----
2201	ND	ND	ND	ND	ND	1.0244
2202	----	----	----	----	----	----
2212	N/A	<0.01	N/A	N/A	N/A	N/A
2218	----	----	----	----	----	----
2230	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2236	----	----	----	----	----	----
2237	<0,01	<0,01	----	<0,01	<0,01	----
2241	----	<0.005	----	<0.005	<0.005	----
2242	----	----	----	----	----	----
2247	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2256	----	----	----	----	----	----
2258	N/D	N/D	N/D	N/D	N/D	N/D
2264	----	----	----	----	----	----
2265	----	< 0,05	< 0,05	< 0,05	< 0,05	----
2267	----	----	----	----	----	----
2272	----	----	----	----	----	----
2288	----	----	----	----	----	----
2289	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2290	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2293	ND	ND	ND	ND	ND	ND
2295	----	----	----	----	----	----
2301	----	----	----	----	----	----
2310	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	----	----	----	----	----	----
2314	----	----	----	----	----	----
2316	NA	NA	NA	NA	NA	NA
2320	----	----	----	----	----	----
2330	ND	ND	ND	ND	ND	ND
2347	<0.005	<0.005	<0.005	<0.005	<0.005	----
2350	----	----	----	----	----	----
2352	----	----	----	----	----	----
2353	NA	NA	NA	NA	NA	NA
2355	<0.005	<0.005	<0.005	<0.005	<0.005	----
2357	----	----	----	----	----	----
2358	N/A	n.d.	N/A	N/A	N/A	N/A
2363	<0.005	<0.005	<0.005	<0.005	<0.005	0.9178
2365	0.005	0.005	0.0050	0.0050	0.0050	----
2366	<0.015	<0.015	<0.015	<0.015	<0.015	Not conducted

Lab	DPHP	DNPP	DUP	DPrP	DMEP	Total Other Phthalates
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
2372	n.d.	n.d.	n.d.	n.d.	n.d.	0.9396
2374	----	----	----	----	----	0.9536
2375	----	----	----	----	----	----
2378	----	----	----	----	----	----
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not tested
2380	----	----	----	----	----	----
2381	----	----	----	----	----	----
2382	0.005	0.005	0.005	0.005	0.005	0.0050
2384	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.005]	N.D.[<0.005]	----
2386	----	----	----	----	----	----
2387	----	----	----	----	----	----
2390	----	----	----	----	----	----
2392	----	----	----	----	----	----
2410	----	----	----	----	----	----
2413	----	----	----	----	----	----
2429	ND	ND	ND	ND	ND	ND
2431	----	----	----	----	----	----
2442	----	nd	nd	nd	nd	0.637
2453	----	----	----	----	----	----
2460	----	----	----	----	----	----
2475	----	----	----	----	----	----
2476	----	ND	----	----	----	----
2477	----	<0.002	----	----	----	----
2489	ND	ND	ND	ND	ND	ND
2495	<0.001	<0.001	<0.001	<0.001	<0.001	----
2500	----	N.D.	----	----	----	----
2501	----	----	----	----	----	----
2507	----	----	----	----	----	----
2510	----	----	----	----	----	----
2511	----	----	----	----	----	----
2522	----	<0.01	----	----	----	----
2529	----	----	----	----	----	----
2532	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
2538	----	----	----	----	----	----
2560	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2563	----	----	----	----	----	----
2567	----	<0.01	<0.01	<0.01	<0.01	<0.01
2572	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2582	----	ND	----	ND	ND	----
2590	----	----	----	----	----	----
2591	----	<0.005	----	----	<0.005	----
2605	----	<0.01	<0.01	<0.01	<0.01	----
2614	ND	ND	ND	ND	ND	----
2642	----	<0.03	----	----	----	----
2643	----	----	----	----	----	----
2649	ND	ND	ND	ND	ND	ND
2674	N.A	<RL	N.A	N.A	N.A	----
2678	----	n.d	----	----	----	----
2688	----	----	----	----	----	----
2719	----	----	----	----	----	----
2720	ND	ND	ND	ND	ND	----
2722	----	----	----	----	----	----
2730	----	----	----	----	----	----
2736	----	----	----	----	----	----
2741	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	----
2826	----	----	----	----	----	----
2829	----	----	----	----	----	----
2835	----	----	----	----	----	----
2857	----	ND	----	----	----	----
2864	----	----	----	----	----	----
2870	----	----	----	----	----	----
2881	0.00	0.00	0.00	0.00	0.00	0.00
2900	----	----	----	----	----	----
2911	----	----	----	----	----	----
2914	----	----	----	----	----	----
2925	----	----	----	----	----	----
2927	----	----	----	----	----	----
3100	----	<0.010	----	<0.010	<0.010	----
3110	----	----	----	----	----	----
3116	----	----	----	----	----	----
3118	----	----	----	----	----	----
3122	<0.025	----	----	<0.025	<0.025	----
3153	----	----	----	----	----	----
3154	----	----	----	----	----	----
3163	----	----	----	----	----	----
3166	----	<0.002	----	----	----	----

Lab	DPHP	DNPP	DUP	DPrP	DMEP	Total Other Phthalates
3172	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
3176	----	----	----	----	----	----
3182	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	----
3185	----	<0.0100	----	----	----	----
3190	----	<0.01	----	<0.01	<0.01	----
3191	----	----	----	----	----	----
3197	n.d	n.d	n.d	n.d	n.d	----
3199	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3209	----	----	----	----	----	----
3210	----	----	----	----	----	----
3214	<0.005	<0.005	<0.005	<0.005	<0.005	1.0318
3218	<0.01	<0.01	<0.01	<0.01	<0.01	1.0017
3225	----	<0.005	----	----	----	----
3228	----	<RL	----	----	----	----
3237	----	----	----	----	----	----
3239	----	----	----	----	----	----
3248	----	----	----	----	----	----
3250	----	----	----	----	----	----
8005	----	----	----	----	----	----
8006	----	----	----	----	----	----
8007	----	----	----	----	----	----
8008	----	----	----	----	----	----
8015	----	----	----	----	----	----
8020	----	----	----	----	----	----
8021	----	< RL	----	----	----	----
8030	Not detected	Not detected	Not detected	Not detected	Not detected	----

APPENDIX 3 Analytical details

Lab	ISO17025 accredited	sample grinded or cut	final particle size	sample intake (g)	extraction solvent	extraction time (min)	extraction temp (°C)
110	Yes	Further Cut	2mm X 2mm	0.05 g	THF/Hexane	120 min	Room temp
210	No	---					
230	---	---					
339	No	Used as received					
348	Yes	---		0,5	Tetrahydrofuran		60±5
362	---	---					
523	Yes	Further Cut	5 mm x 5 mm	0.5 g	THF	60	20°C
551	Yes	Used as received		0.5	THF/Hexane		
623	Yes	Further Cut	2 x 2 mm	0.1 gr	THF Hexane	60 min	60
826	Yes	Used as received	-	0.3 g	THF	60 min	-
840	Yes	Further Cut	2X2mm	0,5	THF-HEXAN	2 h	
841	Yes	Further Cut	1x1mm	0.1g	THF/n-Hexane	60min	60°C
							The number of cycle at least 4 times per hour
1051	Yes	Further Cut	5 mm x 5 mm	1g	Dichloromethane	360 min	90
1842	Yes	Used as received		0.1	Hexane	30	boiling solvent temperature
1910	Yes	Used as received		0,5g	dichloromethane	60 min	temperature
2102	Yes	Used as received		0.15 g	Tetrahydrofuran/hexane (1:2)	2 hours 120 min on shaking table, afterwards standing for 16 hours.	ambient
2104	Yes	Used as received	3mm	1 g	DCM	60 min	25 degrees.
2115	Yes	Used as received	1 mm	0.3 g	THF/Hexane	60 min	60°C
2118	No	Used as received	2x3 mm	0.5g	THF/Hexane 1:2	60 min	60°C
2129	Yes	Used as received	as received	0.5	THF	60	60
2132	Yes	Further Cut	2mm X 2mm	0.05g	Tetrahydrofuran + n-hexane	150 min	Room Temperature
2135	Yes	Used as received	uses as received	0,35 g	THF and Acetonitrile (for precipitation)	60 Min	60°C
2137	Yes	Further Cut		0.3	THF	30	40
2146	---	---					
2156	Yes	Further Cut	<2mm	1 for each sample	Diethyl ether and hexane	60	24 to 27
2165	Yes	Further Cut	2mm*2mm	n.a.	THF / n-Hexane	n.a.	n.a.
2170	Yes	Further Cut	1.0mm x 1.0mm	0.05 grams	THF/Hexane(1:2)	30 min	40°C
2184	Yes	Further Cut	n.a.	1 gr	Dichloromethane	6 hr	n.a.
2201	Yes	Further Cut	2mmx2mm	0.1g	Tetrahydrofuran and n-Hexane	60min	60°C
2202	Yes	Used as received	Used as received sample	0.5g	THF/Toluene/Hexane	Over 4hr	Room temperature
2212	Yes	Further Cut	2mm x 2mm	0.05g	THF + n hexane	150 min	Room Temperature
2218	Yes	Further Cut	2mm	0.05g	THF	30min	nil
2230	Yes	Used as received		0.3	Tetrahydrofuran	30min	40
2236	Yes	Further Cut	1 mm	0.05g	1:2 THF:n-Hexane	90 min	69°C
2237	Yes	Further Grinded	<1mm	2 g	Toluole	60 min	room temperature
2241	Yes	Further Cut	Less than 3mm×3mm	0.5 gram per determination	Dichloromethane	60 min	60°C
2242	No	Used as received		0.500 g	First 50 mL Tetrahydrofuran, then 100 mL n-hexane were added after the polymer dissolved	2.0 h	
2247	Yes	Further Cut	<2mm approximately 2 mm x 2 mm	0.1gm	THF	30 min	25±2°C
2256	Yes	Further Cut	mm x 2 mm	0.3g	THF	30min	40°C
2258	Yes	Used as received	2mm X 2mm	0.3	THF-ACN 1:2 10 ml Tetrahydrofuran, 20 ml n-hexane for precipitation	120 Mn	40
2265	Yes	Further Cut	3-4 mm	0,3 g	THF/Hexane	60 min	60°C
2267	No					120	80

Lab	ISO17025 accredited	sample grinded or cut	final particle size	sample intake (g)	extraction solvent	extraction time (min)	extraction temp (°C)
2272	Yes	Further Cut	less than 1mm	0.3g	THF and hexane	60	60°C
2288	Yes	Further Grinded	powder	0.1gram	THF	60minutes	room temperature
2289	Yes	Further Cut	2mm	1g	Dichloromethane	60mins	60°C
2290	---	---					
2293	Yes	Further Cut	20605 1.29 mm	0.1 grams	10 mL THF and 20 mL hexane	2 hours	at room temperature
2295	Yes	Further Cut	20606 1.37 mm	0.05	THF/n-Hexane	120min	25°C
2301	---	---					
2310	Yes	Further Cut	<3mm	0.1g	THF/Hexane	60	60
2311	Yes	Further Cut	<2mm	0.1g	THF + Hexane	60	60
2313	Yes	Further Cut	3*3mm	0.5g	THF and n-Hexane	1.0hr	60
2314	Yes	Further Cut	2*2 mm	0.1 gms	N-Hexane.THf	60 mts	60
2316	Yes	Further Cut	1mm*1mm*1mm	0.5gram	THF/n-Hexane	60min	60°C
				Near			
2320	Yes	Further Cut	2mm x2mm	0.1g	THF	60min	60°C
			Less than 2 mm x	0.10	THF: n-Hexane (ratio		
2330	Yes	Further Cut	2 mm	gram	1:2)	150 min	40°C
2347	Yes	Further Cut	2*2*2mm	0.3g			
2350	Yes	Further Cut	2mmx2mmx2mm	0.5 g	THF+ACN	2 h	60°C
			<2mmjÁ2mmjÁ2				
2352	Yes	Further Cut	mm	0.6g	Ether , Hexane	6h	Back flow
2353	Yes	Used as received	3mm x 3mm	0.5g	n-hexane	6 h	150
2355	Yes	Further Cut	2mm*2mm*2mm	0.3g	THF and Acetonitrile	60min	60°C
2357	---	---					
						90	Room
2358	Yes	Used as received	3 mm X 3 mm	0.05 g	THF	minutes	temperature
2363	Yes	Further Cut	2*2mm.mm	1.5g	tft	60min	60c
2365	Yes	Further Cut	2mm*2mm*2mm	0.3g	THF hexane	60min	60°C
					THF precipitation		
2366	Yes	Further Cut	2mm*2mm*2mm	0.1g	solvent: n-hexane	60min	60°C
2369	---	---					
					THF : Acetonitrile = 10 :		
2370	Yes	Used as received	Less than 5 mm	0.3 g	20 mL	60 min	60°C
							Room
2372	Yes	Used as received	0.3cm	0.5	THF	60	temperature
2374	Yes	Used as received	4*4mm	0.1g	THF/Hexane	1 h5 min	60°C
						6 h - 360	Soxhlet
2375	Yes	Further Cut	3mm x 3mm	1,5 gr	Diethyl ether	min	Extraction
2378	Yes	Further Cut	2mm*2mm*2mm	0.1g	THF-n-Hexane=1£°1	60min	60°C
			500 micrometer				
2379	Yes	Further Grinded	(µm)	0.5 g	THF : ACN	60 min	60°C
2380	Yes	Used as received	2-3 mm X 2-3 mm	0.1 g	Tetrahydrofuran (THF)	60 min	60 °C
2381	Yes	Further Cut	3x3mm	0.1g	THF/Hexane	60 min	60 °C
2382	Yes	Further Cut	2mm*2mm	0.1g	tetrahydrofuran	60min	60 °C
2384	Yes	Further Grinded	<500um	0.5g	tetrahydrofuran	60 min	60°C
2386	Yes	Used as received	3x3x3 mm	0,500 g	Tetrahydrofurane	60 min	60 °C
						60	
2387	Yes	Further Cut		0.3g	THF, ACN	minutes	60 °C
2390	Yes	Further Cut	< 2mm	0.1g	Tetrahydrofuran	60min	60C
					Tetrahydrofuran :		
2392	Yes	Further Cut	< 500 micrometer	0.5 g	Acetonitrile 1 : 2	60 min	60°C
			2 mm x 2 mm x 2				
2410	Yes	Used as received	mm	0.5 g	THF/n-Hexane	60 min	70°C
				Sample			
				#20605			
				=			
				0.1508g			
				Sample			
				#20606			
				=	10ml THF followed by		Room
2413	Yes	Further Cut	NA	0.1521g	20ml Hexane	30 in THF	Temperature
2429	Yes	Further Cut	2mmx2mm	1g	Tetrahydrofuran	30min	Sonicated
2431	Yes	Further Cut	2mm x 2mm	0.05g	THF	30min	room temp.
					Tetrahydrofuran &		
2442	Yes	Further Cut	2mmx2mm	0.1g	Acetonitrile	30 min	40 °C
				0.030 to			
2453	Yes	Further Cut	2 mm	0.300	THF/n-Hexan	60	60
2460	---	---					
2475	---	---					
					Tetrahydrofuran /		
2476	Yes	Further cut prior to analysis	<5 mm	0.5 gm	Acetonitrile (1:2)	60 min	50°C
2477	---	---					

Lab	ISO17025 accredited	sample grinded or cut	final particle size	sample intake (g)	extraction solvent	extraction time (min)	extraction temp (°C)
2489	Yes	Further Cut	2mm	0.10769/ 0.10209	THF	60 minutes	60 °C
2495	Yes	Used as received		0.15	THF	60 120	60
2500	Yes	Further Cut	2mm x 2mm x 2mm	0.3g	THF Hexane and tetrahydrofuran	minutes	40°C
2501	No	Used as received	2mm*2mm	0.3g		60 min	60
2507	---	---					
2510	Yes	Used as received	Used as received	0.05 - 0.08 g	Acetonitrile	1 minute	Room temperature
2511	---	---					
2522	Yes	Further Cut	Less than 2mm	0.05 g	THF	150 min	Room temperature
2529	---	---					
2532	Yes	Further Cut	2mm	0.1g	THF/n-Hexane	30 minutes	room temperature
2538	---	---					
2560	Yes	Used as received	N/A	0.5gr	THF/n-Hexane	60 minutes	60 °C
2563	Yes	Used as received		0,3	THF	60 30	60
2567	Yes	Further Cut	2mm X 2mm	--	THF & N-hexane	minutes	40°C
2572	---	---					
2582	Yes	Used as received	~5 mm dimension	#20605- 0.5119 g #20606- 0.5524 g	n-Hexane	60 minutes	60 °C
2590	Yes	Used as received		0.3G	THF:HEX 10:20	60MIN	60°C
2591	Yes	Further Cut		0.1 grams	THF/n-Hexane	2 hours	room temperature
2605	Yes	Further Cut	2mmx2mm	0.050g	THF/n-Hexane	150 min	room temperature
2614	Yes	Used as received	2mm*2mm	0.3g	THF/Hexane	60min	60°C
2642	Yes	Further Cut	2mm X 2mm	0.05g	THF and n-hexane		
2643	Yes	Further Cut		0.05 g	THF + Hexane	60 30 min (CPSIA) & 60 min (ISO)	60 Room Temp. (CPSIA) & 60°C (ISO)
2649	Yes	Further Cut	2mmx2mm	0.3g	THF/n-Hexane		
2674	Yes	Further Cut	3mm*3mm	0.5g	THF	N.A 90	N.A
2678	No	Further Cut	2 mm	0.05g	THF/Hexane	minutes	60°C
2688	Yes	Used as received		0.3g	THF	30min	40°C
2719	Yes	Further Cut	<2mm	0.1g	THF Tetrahydrofuran with n- hexane	1hour 60min	60°C room temperature
2720	Yes	Further Cut	2mm*2mm	0.05g 0.15g			
2722	Yes	Further Cut	2mmx2mm	each trial	THF(precipitated by n- Hexane)	60	50
2730	No	Used as received		0.3	THF	60	60
2736	Yes	Further Cut	< 5 x 5 mm square	0.5g	THF Tetrahydrofuran/n- hexane	60 min	room temp in ultrasonic bath
2741	Yes	Further Cut	2mm x 2mm	0.5		60	60
2826	Yes	Further Cut	2mm x 2mm	0.05g	Tetrahydrofuran (THF)	2.5hr	Room Temperature
2829	No	Further Cut	1x1 mm	0.050 g	THF	30 min	35 °C
2835	Yes	Further Cut	1mm	Approximately 0.5g 0.03 ~ 0.04 g for the submitted results due to knowing the concentration level after first trial	Methylene Chloride	5 min	100°C
2857	Yes	Further Cut	< 2mm x 2mm x 2mm	using 0.3 g	THF	60	60°C

Lab	ISO17025 accredited	sample grinded or cut	final particle size	sample intake (g)	extraction solvent	extraction time (min)	extraction temp (°C)
2864	Yes	Further Grinded	<1 mm	0.05	THF/Hexane	60 min	60
2870	Yes	Further Cut	1-2 mm	0.3 gm	THF: n-Hexane (1:2)	90 min	60°C
2881	Yes	Used as received	0.3mmx0.3mm	0.5g	n - hexane	60 minutes	60°C
2900	Yes	Used as received	Used as received	0.0993 g	- TETRAHYDROFURAN - ACETONITRILE	120 MIN	40 °C room temperature,
2911	Yes	Further Cut	less than 2 mm in any direction Sample treated as received	0.4 g	THF	30 min	23C +/- 3C
2914	No	Used as received	Used as received	600 mg	THF Hexane/Acetone/TBME	120	45
2925	Yes	Used as received	no	0,5 gr	1:1:1	120 min	60°C
2927	No	Further Cut	0.1 mm ~ 0.3 mm	0.4 g ~0.6 g	THF	60min	60°C room temperature
3100	Yes	Further Cut	2mm*2mm	0.2182g	THF	30minutes	room temperature
3110	---	---					
3116	---	---					
3118	Yes	Further Cut	2mm x 2mm	0.1 g	THF and acetonitrile	30 min	room temperature
3122	Yes	Used as received	3x3x3 mm	0.5	Methanol	30 min	120°C Room temperature
3153	Yes	Further Cut	2mm	0.1g	Tetrahydrofuran	150min	Room temperature
3154	Yes	Used as received		0,5	Toluol	60	50
3163	No	Further Cut	2mm	0.2	toluene	60	60
3166	Yes	Used as received		0.5	DCM		ambient
3172	Yes	Used as received	-	1	THF-ACN	60	25 room temperature
3176	Yes	Used as received	as received	0,5 g	THF/ACN n-Hexane :	30 min	room temperature
3182	Yes	Further Grinded	0.5 millimeters	0.05 g	Tetrahydrofuran (2:1)	2 h Shake for	room temperature
3185	Yes	Further Cut	about 2mm*2mm	0.05g	Tetrahydrofuran Extracted with tetrahydrofuran, and Precipitated with n-hexane	150min	/
3190	Yes	Further Cut	≤2mm	0.05g		30min +2 h	room temperature Normal
3191	Yes	Used as received	3mmx3mm.	0.1 g.	Tetrahydrofuran. Extraction: THF / Precipitation: n-hexane	150 min.	Room temperature.
3197	Yes	Further Cut	2 mm x 2 mm	0,1 g	THF	60 min	Room temperature
3199	No	Used as received	as received	0.3 g		120	40
3209	---	---					
3210	Yes	Used as received		1 gram	Toluene	60 min	60°C
3214	Yes	Further Cut	2*2 mm	0.5 g	THF/Hexane	60 min	70°C
3218	Yes	Used as received	3x3mm	0.5g	tetrahydrofuran	60min	60°C
3225	Yes	Further Cut	2mm x 2mm	0.2g	THF, n-hexane	60 minutes	70
3228	---	Further Cut	2mm*2mm	NA	THF/n-Hexane	NA	NA
3237	Yes	Used as received	1X1 mm	0,1 gr	THF/ACN	30 min	40 °C
3239	Yes	Further Grinded	~5um	0.1g	N-hexane	240min	100°C Room temperature
3248	Yes	Further Cut	2mm x 2mm	0.1	THF	150	Room temperature
3250	Yes	Used as received	2 mm x 2 mm	0.3	THF:ACN(1:2)	2 h	40
8005	---	---					
8006	---	---					
8007	---	---					
8008	---	---					
8015	Yes	Further Cut	1mm	0.5g	THF	15 min	20°C
8020	Yes	Further Cut	n.a.	0.3 g	THF / ACN	n.a.	n.a.
8021	Yes	Further Cut	n.a.	n.a.	THF/n-Hexane Hexane : Acetone (70:30)	n.a.	n.a.
8030	Yes	Used as received	2 x 2 mm	0.5 g		12 h	40°C

APPENDIX 4**Number of participating laboratories per country**

5 labs in BANGLADESH
1 lab in BELGIUM
1 lab in BRAZIL
1 lab in BULGARIA
3 labs in CAMBODIA
1 lab in CZECH REPUBLIC
1 lab in DENMARK
1 lab in EGYPT
1 lab in FINLAND
4 labs in FRANCE
8 labs in GERMANY
2 labs in GUATEMALA
22 labs in HONG KONG
10 labs in INDIA
3 labs in INDONESIA
1 lab in IRELAND
6 labs in ITALY
1 lab in JAPAN
3 labs in MALAYSIA
1 lab in MAURITIUS
3 labs in MEXICO
1 lab in MOROCCO
31 labs in P.R. of CHINA
1 lab in PAKISTAN
1 lab in PERU
2 labs in POLAND
1 lab in PORTUGAL
3 labs in SINGAPORE
8 labs in SOUTH KOREA
4 labs in SPAIN
2 labs in SRI LANKA
1 lab in SWITZERLAND
6 labs in TAIWAN
4 labs in THAILAND
3 labs in THE NETHERLANDS
2 labs in TUNISIA
5 labs in TURKEY
9 labs in U.S.A.
1 lab in UNITED KINGDOM
7 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	= possibly an error in calculations
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

Literature

- 1 iis Interlaboratory Studies, Protocol for the Organisation, Statistics & Evaluation, June 2018
- 2 ASTM E178:02
- 3 ASTM E1301:03
- 4 ISO5725:1986
- 5 ISO5725, parts 1-6, 1994
- 6 ISO13528:05
- 7 M. Thompson and R. Wood, J. AOAC Int, 76, 926, (1993)
- 8 W.J. Youden and E.H. Steiner, Statistical Manual of the AOAC, (1975)
- 9 IP367/84
- 10 DIN38402 T41/42
- 11 P.L. Davies, Fr. Z. Anal. Chem, 331, 513, (1988)
- 12 J.N. Miller, Analyst, 118, 455, (1993)
- 13 Analytical Methods Committee, Technical brief, No 4, January 2001.
- 14 P.J. Lowthian and M. Thompson, The Royal Society of Chemistry, Analyst 2002, 127, 1359-1364 (2002)
- 15 R.G. Visser, Reliability of proficiency test results for metals and phthalates in plastics, Accred Qual Assur, 14, 29-34 (2009)
- 16 Annex XVII to REACH Regulation 1907/2006
- 17 Bernard Rosner, Percentage Points for a Generalized ESD Many-Outlier Procedure, Technometrics, 25(2), 165-172, (1983)
- 18 iis memo 1701: Precision data of Phthalates in plastic, www.iisnl.com, News and Report page (July 2017)